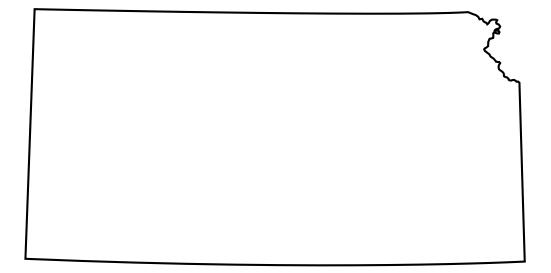
Water Resources Data Kansas Water Year 2001

By J.E. Putnam, D.L. Lacock, and D.R. Schneider

Water-Data Report KS-01-1





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2002

PREFACE

This volume of the annual hydrologic data report for Kansas is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and water quality provide the hydrologic information needed by local, State, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines.

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This report was prepared in cooperation with the State of Kansas and with other agencies under the general supervision of James E. Putnam, Hydrologic Data Management Section Chief, and Walter R. Aucott, District Chief, Kansas.

This report is dedicated to Dennis L. (Butch) Lacock who retired on January 3, 2001, with more than 36 years of service to the U.S. Geological Survey, Water Resources Division. Throughout his career, Butch collected, processed, or reviewed much of the surfacewater data presented in this and many previous annual reports. Butch's experience in surface-water operations and his attention to detail will be missed.

Form Approved OMB No. 0704-0188 REPORT DOCUMENTATION PAGE Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215_lefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. 1. AGENCY USE ONLY (Leave blank) 2. REPORT DATE 3. REPORT TYPE AND DATES COVERED Annual-Oct. 1, 2000, to Sept. 30, 2001 March 2002 4. TITLE AND SUBTITLE 5. FUNDING NUMBERS Water Resources Data--Kansas, Water Year 2001 6. AUTHOR(S) J.E. Putnam, D.L. Lacock, and D.R. Schneider 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) 8. PERFORMING ORGANIZATION REPORT NUMBER U.S. Geological Survey USGS-WDR-KS-01-1 4821 Quail Crest Place Lawrence, Kansas 66049-3839 10. SPONSORING / MONITORING AGENCY REPORT NUMBER 9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Geological Survey USGS-WDR-KS-01-1 4821 Quail Crest Place Lawrence, Kansas 66049-3839 11. SUPPLEMENTARY NOTES Prepared in cooperation with the State of Kansas and other agencies 12b. DISTRIBUTION CODE 12a DISTRIBUTION / AVAILABILITY STATEMENT No restriction on distribution. This report may be purchased from: National Technical Information Service, Springfield, VA 22161 13. ABSTRACT (Maximum 200 words) Water-resources data for the 2001 water year for Kansas consist of records of stage, discharge, and water quality of streams; elevation and contents of lakes and reservoirs; and water levels of ground-water wells. This report contains records for water discharge at 145 complete-record gaging stations; elevation and contents at 20 lakes and reservoirs; waterquality records at 2 precipitation stations, water-level data at 19 observation wells; and records of specific conductance, pH, water temperature, dissolved oxygen, and turbidity at 11 gaging stations. Also included are discharge data for 26 high-flow partial-record stations, miscellaneous onsite water-quality data collected at 140 stations, and suspended-sediment concentration for 12 stations. These data represent that part of the National Water Information System collected by the U.S. Geological Survey in cooperation with local, State, and Federal agencies in Kansas. 15. NUMBER OF PAGES 14 SUBJECT TERMS "Kansas, *Hydrologic data, *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Water 532

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INTRODUCTION

The U.S. Geological Survey, in cooperation with local, State, and Federal agencies, collects a large amount of data pertaining to the water resources of Kansas each water year (October 1 to September 30). These data, accumulated during many water years, constitute a valuable database for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Kansas." Historic and current streamflow, water-quality, and ground-water data also are available on the World Wide Web at: http://ks.water.usgs.gov/ and http://ks.water.usgs.gov/nwis/.

This report contains records for water discharge at 145 complete-record streamflow-gaging stations; complete records of elevation and contents at 20 lakes and reservoirs; water-quality records at 2 precipitation stations; water levels at 19 observation wells; and records of specific conductance, pH, water temperature, dissolved oxygen, and turbidity at 9 gaging stations and 2 lakes with water-quality monitors. Also included are discharge data for 26 high-flow partial-record streamflow-gaging stations, miscellaneous onsite water-quality data for 140 stations, and suspended-sediment concentration for 12 stations. Locations of complete-record surface-water stations, 2001 water year, are shown in figure 1. Locations of complete-record water-quality stations and suspended-sediment sample stations, 2001 water year, are shown in figure 2. Locations of high-flow partial-record streamflow-gaging stations, 2001 water year, are shown in figure 3. The number of ground-water-level observation wells per county, 2001 water year, are shown in figure 4.

This series of annual reports for Kansas began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and groundwater levels.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Kansas were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir elevation and contents, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Parts 6 and 7." For the 1961 through 1970 water years, the data were published in two 5-year reports, 1961-65 and 1966-70. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above-mentioned Water-Supply Papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the Branch of Information Services, Federal Center, Box 25286, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report KS-01-1." For archiving and general distribution, the reports for the 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161.

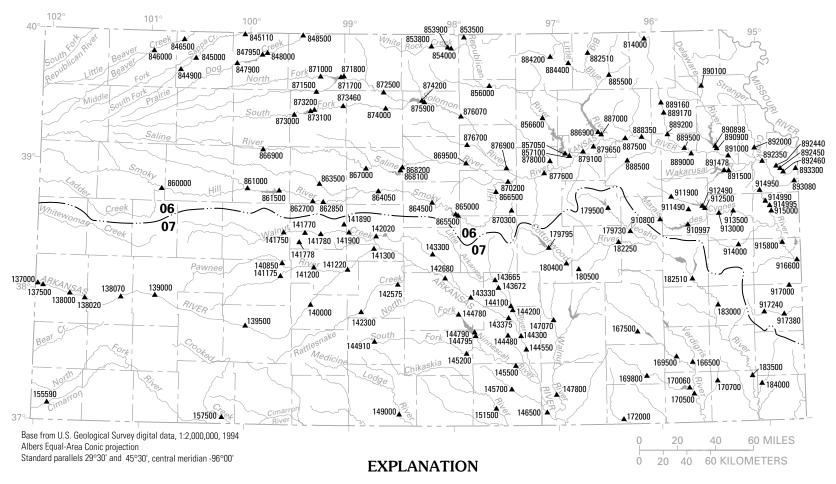
Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (785) 842-9909.

COOPERATION

The U.S. Geological Survey and agencies of the State of Kansas have had cooperative agreements for the collection of water-resources records since 1895. Organizations that helped support this program through cooperative funding agreements with the Survey are: Kansas Water Office; Kansas Department of Transportation; Kansas Department of Agriculture, Division of Water Resources; city of Wichita; Kansas Department of Health and Environment; Arkansas River Compact Administration; Groundwater Management District number 5; Hillsdale Lake Resource and Conservation District; city of Hays; Johnson County Department of Public Works; city of Olathe; city of Hutchinson; and city of Topeka.

The following Federal agencies assisted in the data-collection program by providing funds: U.S. Army Corps of Engineers and U.S. Department of the Interior, Bureau of Reclamation.

The U.S. Geological Survey, the Kansas Water Office, using State Water Plan Funds, and the U.S. Army Corps of Engineers provide the largest share of funds for operation of data-collection stations.



149000▲ Complete-record station and number—Includes complete-record streamflow-gaging stations and stations that measure elevation and contents of lakes and reservoirs

Note: Numbers are abbreviated versions of the complete identification numbers

Drainage basin

- **06** Missouri River Basin
- 07 Lower Mississippi River Basin

——— Basin boundary

Figure 1. Location of complete-record surface-water stations, 2001 water year.

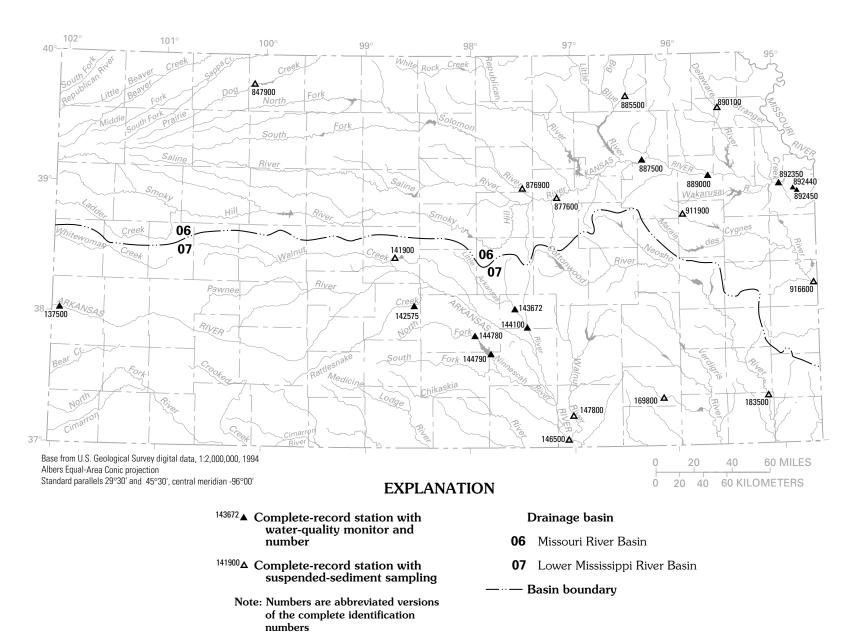


Figure 2. Location of complete-record water-quality stations and suspended-sediment sample stations, 2001 water year.

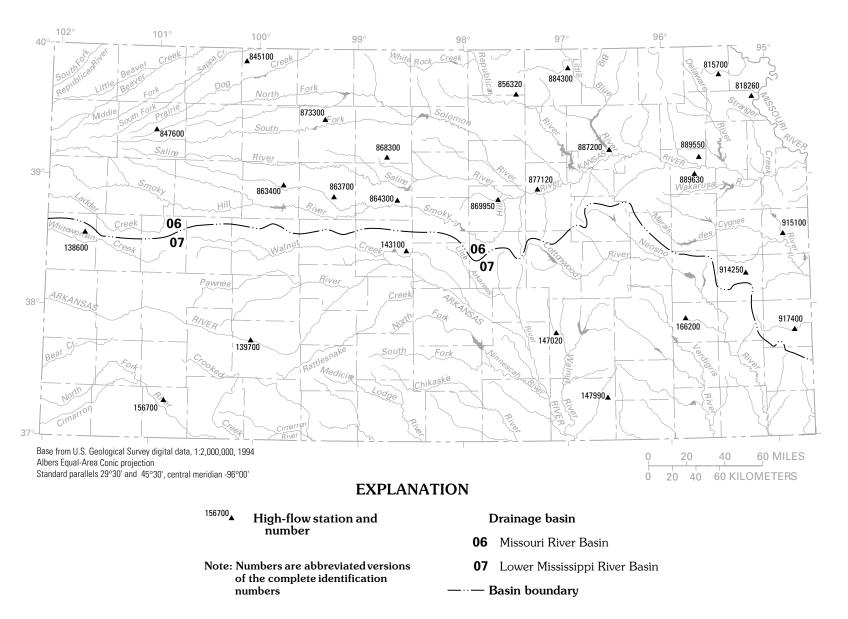


Figure 3. Location of high-flow partial-record streamflow-gaging stations, 2001 water year.

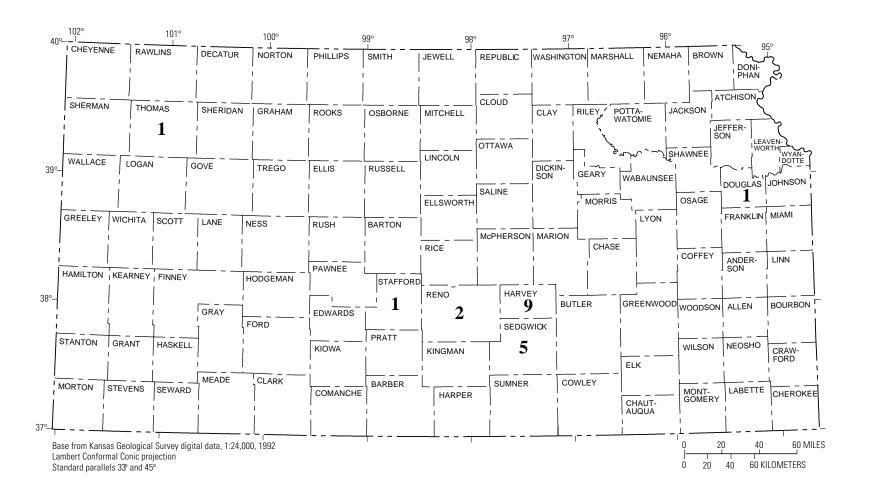


Figure 4. Number of ground-water-level observation wells per county, 2001 water year.



Big Blue River at Marysville (station 06882510, operated by Kansas office of U.S. Geological Survey), P.E. Mentgen measuring streamflow under ice. Photograph courtesy of D.A. Hargadine.

Surface Water

Large spatial and temporal variations in streamflow characterize hydrologic conditions in Kansas. In the extreme southeastern part of the State, mean annual precipitation exceeds 40 in., and mean annual runoff exceeds 10 in. In the east, stream channels are deeply incised in wide, alluvial flood plains, and streamflow generally is perennial. In the extreme western part of the State, mean annual precipitation is less than 20 in., and mean annual runoff is less than 0.1 in. In western Kansas, streams generally have shallow, ill-defined channels, and streamflow generally is ephemeral.

Precipitation data from monthly reports of the National Weather Service for reporting areas in Kansas (fig. 5) are summarized in table 1. Precipitation during the 2001 water year was near or above normal across the entire State. Precipitation totals ranged from 124 percent of normal in northeast Kansas to 100 percent of normal in southeast Kansas. The largest departures from normal precipitation occurred in the second quarter (January-March) of the year. Above-normal precipitation in February resulted in many annual peaks at streamflow-gaging stations in east-central, south-central, and southeast Kansas. Precipitation for February in east-central Kansas was 2.75 in. above normal. April-June was the driest part of the year with departures from normal precipitation ranging from between 1.57 in. below normal in northwest Kansas to 3.45 in. above normal in northeast Kansas. Figure 6 shows a comparison of precipitation for water years 1999-2001 with normal precipitation for the period 1961-90.

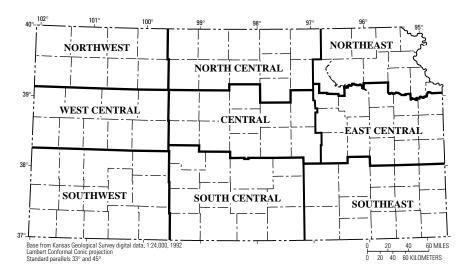


Figure 5. Reporting areas of the National Weather Service.

Table 1. Precipitation during 2001 water year and departure from normal

[All values are in inches. Period of record for normal, 1961-90. Source: U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service published reports]

Reporting area of State		quarter -December)		d quarter ry-March)		d quarter ril-June)		quarter eptember)	Water-	-year totals
	Precipi- tation	Departure from normal								
Northwest	4.48	2.01	2.78	0.44	7.28	-1.57	8.52	1.34	23.06	2.22
North central	4.43	.73	4.91	1.66	12.08	1.88	10.88	1.32	32.30	5.59
Northeast	5.53	57	7.46	3.32	16.42	3.45	17.32	5.12	46.73	11.32
West central	4.79	2.37	2.76	.45	7.90	.08	8.61	1.45	24.06	4.35
Central	5.25	.83	5.93	2.41	11.44	.86	10.66	1.10	33.28	5.20
East central	6.67	11	7.34	2.56	14.56	1.02	12.20	.45	40.77	3.92
Southwest	4.47	2.15	3.69	1.54	8.02	.47	6.18	86	22.36	3.30
South central	7.42	2.97	5.99	2.48	10.71	.55	7.15	-1.84	31.27	4.16
Southeast	7.96	.06	8.23	2.63	12.43	-1.24	10.21	-1.49	38.83	04

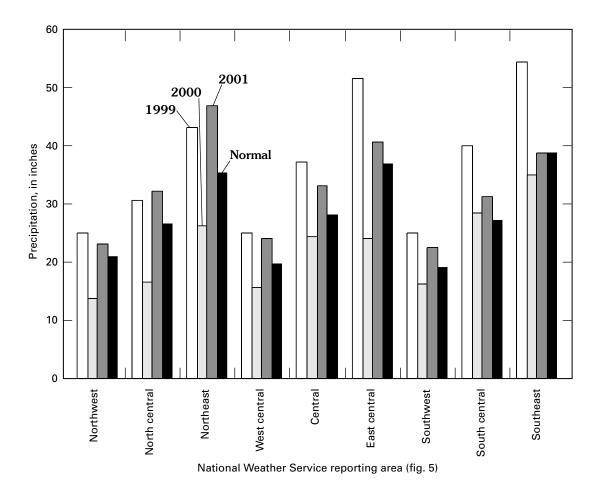


Figure 6. Precipitation for water years 1999-2001 and normal precipitation (1961-90) for nine National Weather Service reporting areas in Kansas.

Minimum daily streamflow and 7-day low flow for the 2001 water year at 10 index stations are compared to the long-term minimum daily streamflow and 7-day, 2-year low flow for the period of record in table 2. These stations were selected to depict natural-flow conditions at representative locations within Kansas. The minimum daily streamflow and 7-day low flow during the 2001 water year were greater than those recorded during the 2000 water year at stations: 06870000, Saline River near Russell; 06884400, Little Blue River near Barnes; and 07149000, Medicine Lodge River near Kiowa. The increases were caused by above-normal precipitation in those areas of the State during 2001 water year, whereas streamflows during the 2000 water year were lower than normal because of drought conditions. The minimum daily streamflow and 7-day low flow during the 2001 water year were the same or near the low flows recorded during the 2000 water year at stations: 06846500, Beaver Creek at Cedar Bluffs; 06814000, Turkey Creek near Seneca; 06914000, Pottawatomie Creek near Garnett; 07144200, Little Arkansas River at Valley Center; and 07184000, Lightning Creek near McCune. Minimum recorded daily streamflow at station 06860000, Smoky Hill River at Elkader was 0 ft³/s, the lowest daily streamflow since 1996. The minimum recorded daily streamflow at station 07157500, Crooked Creek near Englewood also was 0 ft³/s, the lowest daily streamflow since 1991. These streams are located in parts of the State that still were experiencing the effects of drought conditions during the 2000 water year.

Table 2. 2001 water year and long-term minimum daily streamflow and low flows at selected streamflow-gaging stations

[Streamflow and low-flow values are given in cubic feet per second]

			2001 water	year	Long term (period	of record)
Site number on index map (fig. 7)	Station identification number and name	Period of record (water years)	Minimum daily streamflow	7-day low flow	Minimum daily streamflow (water year of most recent occurrence)	w 7-day, 2-year low flow
1	06846500 Beaver Creek at Cedar Bluffs	1946-2000	0	0	0 (2000)	0
2	06867000 Saline River near Russell	1946-53, 1960-2000	7.6	8.2	.10 (1964)	5.86
3	06884400 Little Blue River near Barnes	1959-2000	95	100	24 (1964)	108
4	06814000 Turkey Creek near Seneca	1949-2000	.15	.40	0 (1989)	1.86
5	06860000 Smoky Hill River at Elkader	1940-2000	0	0	0 (1996)	0
6	06914000 Pottawatomie Creek near Garnett	1940-2000	0	0	0 (2000)	.08
7	07157500 Crooked Creek near Englewood	1943-2000	0	0	0 (1991)	.50
8	07149000 Medicine Lodge River near Kiowa	1938-50, 1955, 1960-2000	7.4	11	0 (1980)	2.24
9	07144200 Little Arkansas River at Valley Center	1923-2000	13	17	1.1 (1957)	19.2
10	07184000 Lightning Creek near McCune	1939-46, 1960-2000	0	0	0 (2000)	0

Monthly and annual mean streamflow during water year 2001 at selected index streamflow-gaging stations are compared to long-term (reference period through previous water year) monthly and annual streamflow in figure 7. Annual mean streamflow during the 2001 water year was greater than the long-term annual streamflow at only 4 of the 10 index stations shown in table 2. Stations 06867000, Saline River near Russell, 06814000, Turkey Creek near Seneca, 07149000, Medicine Lodge River near Kiowa, and 07144200, Little Arkansas River near Valley Center are located in parts of the State that experienced the largest total precipitation during the 2001 water year.

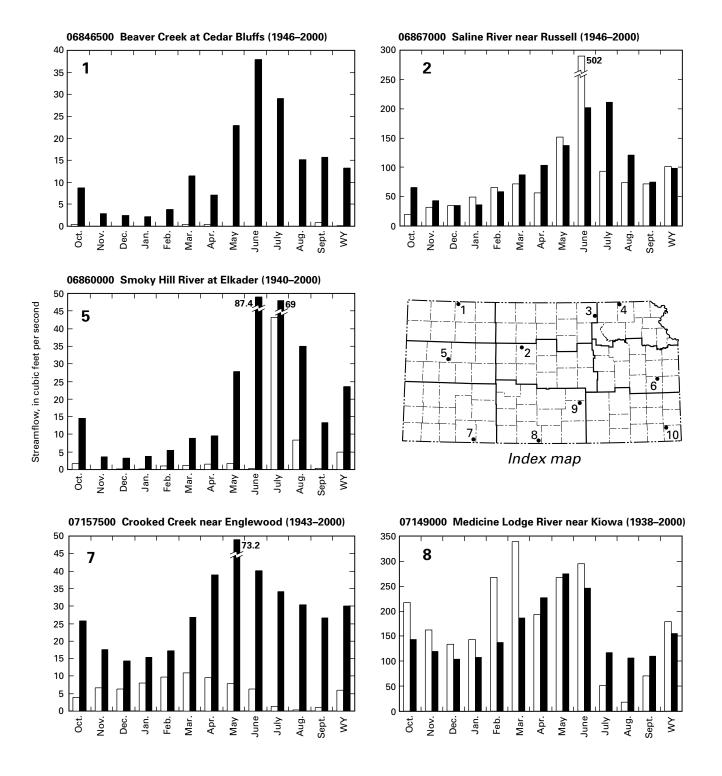


Figure 7. Comparison of 2001 water year monthly and annual mean streamflow to long-term mean of monthly and annual mean streamflow at selected streamflow-gaging stations.

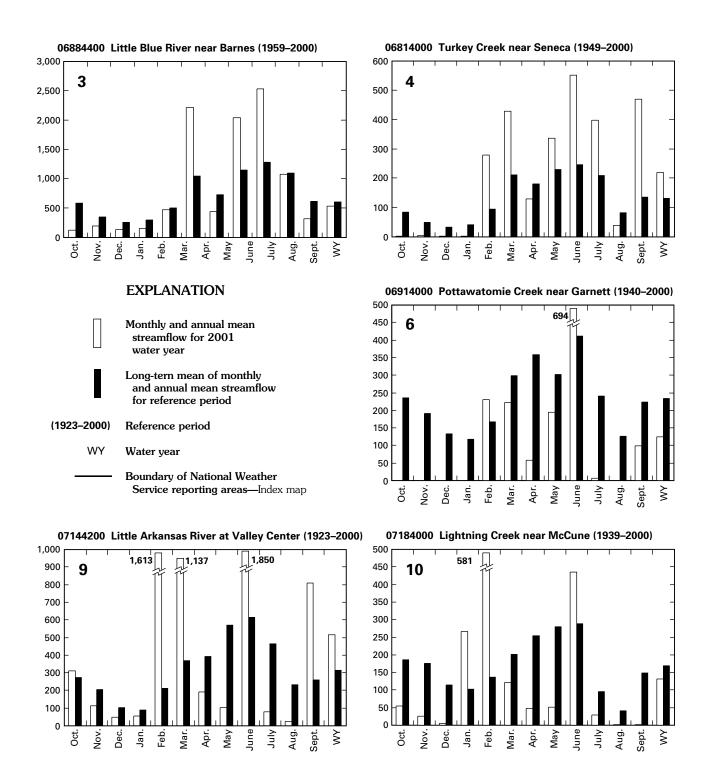


Figure 7. Comparison of 2001 water year monthly and annual mean streamflow to long-term mean of monthly and annual mean streamflow at selected streamflow-gaging stations--Continued.

Drought conditions during the 2000 water year persisted into February 2001, resulting in only a limited recovery to annual streamflow across the State during the 2001 water year. Above-normal precipitation during the 2001 water year affected monthly streamflows at many of the index stations. For example, monthly streamflows at station 06814000, Turkey Creek near Seneca, were greater than the long-term monthly streamflows in February, March, May, June, July, and September.

Although precipitation in Kansas was generally above normal during the 2001 water year, drought conditions continued from the 2000 water year into the first two quarters of 2001 (October to March) resulting in below-normal streamflows at many streamflow-gaging stations. The U.S. Drought Monitor reports drought information on the internet at http://enso.unl.edu/monitor/monitor.html. The U.S. Department of Agriculture, the National Drought Mitigation Center (University of Nebraska-Lincoln), U.S. Department of Commerce (National Oceanic and Atmospheric Administration), and the U.S. Geological Survey contribute data and support for this information. According to the U.S. Drought Monitor, moderate drought conditions were prevalent in October 2000 in the northern half of the State and counties in east-central and northeast Kansas. Severe drought conditions existed in the north-central and northeast areas of the State. Abnormally dry conditions prevailed in north-central and northeast Kansas. Precipitation in late October and early November lessened the drought conditions in the State and by the end of November, only counties in northeast Kansas were in moderate to severe drought. Similar conditions continued during December 2000 and January 2001, but February precipitation in the form of a winter storm provided relief to the drought-affected areas of the State. More normal precipitation patterns during the remainder of the 2001 water year resulted in no return of the drought conditions.

Station 06856000, Republican River at Concordia, recorded flows well below normal for much of the 2000 water year (fig. 8) because of drought conditions. Below-normal streamflows in the Republican River continued into early 2001 water year until significant precipitation fell in late February. Streamflow in the Republican River recovered and generally was within the normal range of flow for the remainder of the 2001 water year. Normal range of flow was computed using 25-percentile streamflow and 75-percentile streamflow for each day for 47 years of record. The 75-percentile streamflow is equal to or greater than 75 percent of the mean streamflow on any given day of the year during all years that measurements have been made.

The State has established minimum desirable streamflow for many streams in the State. Table 3 lists the number of days that streamflow was less than the minimum desirable streamflow for selected stations. The Republican River at Clay Center flowed below State minimum streamflow nearly every day between October 2000 through January 2001 and most of February. When streamflow is less than the State minimum desirable streamflow for 7 consecutive days, the Division of Water Resources, Kansas Department of Agriculture, begins administrative processes to curtail surface-water diversions for those with junior water rights.

Water levels in all reservoirs in the State were at or above conservation-pool or irrigation-pool elevation by the end of the 2001 water year. The lowest water level recorded on February 21, 2001, at station 06910997, Melvern Lake near Melvern, was within 0.5 ft of the lowest ever recorded, 1,029.86 ft on February 11, 1992.

Data from the surface-water network, as well as information about selected stations, are available on the World Wide Web at:

http://ks.water.usgs.gov/

Table 3. Number of days of streamflow less than Kansas minimum desirable streamflow at selected streamflow-gaging stations, 2001 water year

		Number of days less than Kansas minimum desirable streamflow						
Station identification number and name		October	November	December	January	February	March	April
06856000	Republican River at Concordia	31	27	31	29	28	5	0
06856600	Republican River at Clay Center	31	29	31	30	22	0	0
06890100	Delaware River near Muscotah	21	25	31	31	26	0	0
07183500	Neosho River near Parsons	19	16	30	7	0	0	0

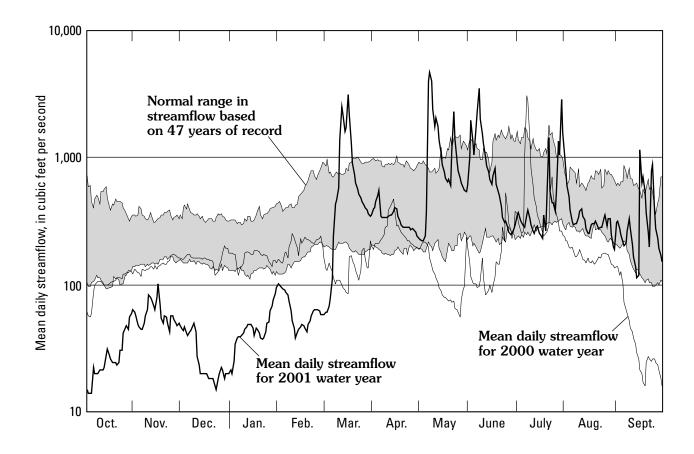


Figure 8. Mean daily streamflow for 2000 and 2001 water years for Republican River at Concordia (station 06856000) compared with normal range (daily discharge within 25- to 75-percentile range for period of record) of streamflow for 47 years of record.

Surface-Water Quality

Surface-water-quality data contained in this report include continuous records of specific conductance, pH, temperature, dissolved oxygen, and turbidity collected at 11 stations (fig. 2) and suspended-sediment concentration data collected at 12 stations (fig. 2). Stream specific conductance and water temperature data are shown on pages 449 to 479 for miscellaneous stations. Conversion of degrees Celsius to degrees Fahrenheit is shown in table 4, and factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter are shown in table 5.

Table 4. Conversion of degrees Celsius (°C) to degrees Fahrenheit (°F)¹

[Temperature reported to nearest 0.5 °C]

-	•	•			-						
	°C	°F	°C	٥F	°C	°F	°C	٥F	°C	٥F	
	0.0	32	10.0	50	20.0	68	30.0	86	40.0	104	
	0.5	33	10.5	51	20.5	69	30.5	87	40.5	105	
	1.0	34	11.0	52	21.0	70	31.0	88	41.0	106	
	1.5	35	11.5	53	21.5	71	31.5	89	41.5	107	
	2.0	36	12.0	54	22.0	72	32.0	90	42.0	108	
	2.5	36	12.5	54	22.5	72	32.5	90	42.5	108	
	3.0	37	13.0	55	23.0	73	33.0	91	43.0	109	
	3.5	38	13.5	56	23.5	74	33.5	92	43.5	110	
	4.0	39	14.0	57	24.0	75	34.0	93	44.0	111	
	4.5	40	14.5	58	24.5	76	34.5	94	44.5	112	
	5.0	41	15.0	59	25.0	77	35.0	95	45.0	113	
	5.5	42	15.5	60	25.5	78	35.5	96	45.5	114	
	6.0	43	16.0	61	26.0	79	36.0	97	46.0	115	
	6.5	44	16.5	62	26.5	80	36.5	98	46.5	116	
	7.0	45	17.0	63	27.0	81	37.0	99	47.0	117	
	7.5	45	17.5	63	27.5	81	37.5	99	47.5	117	
	8.0	46	18.0	64	28.0	82	38.0	100	48.0	118	
	8.5	47	18.5	65	28.5	83	38.5	101	48.5	119	
	9.0	48	19.0	66	29.0	84	39.0	102	49.0	120	
	9.5	49	19.5	67	29.5	85	39.5	103	49.5	121	

 $^{^{10}}$ C = 5/9 (0 F - 32) or 0 F = 9/5 (0 C) + 32.

Table 5. Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

lon	Multiply by	lon	Multiply by
Ammonia (NH ₄ +1)	0.05544	Nitrate (NO ₃ ⁻¹) Phosphate (PO ₄ ⁻³)	0.01613
Calcium (Ca ⁺²)	.04990	Phosphate (PO ₄ -3)	.03159
Carbonate (CO3 ⁻²)	.03333	Potassium (K ⁺¹)	.02557
Chloride (Cl ⁻²)	.02821	Sodium (Na ⁺¹)	.04350
Hydrogen (H ⁺¹)	.99209	Sodium (Na ⁺¹) Sulfate (SO ₄ ⁻²)	.02082
Magnesium (Mg+2)	.08226	,	

NOTE: Nitrate (N) x 4.427 = Nitrate (NO₃) Phosphorus (P) x 3.066 = Phosphate (PO₄)

Included in this report are water-quality data recorded at 11 complete-record water-quality monitoring stations--Kansas River at Wamego (see pages 182-191), Kansas River at Topeka (see pages 196-205), Kansas River at DeSoto (see pages 229-238), Cedar Creek at Highway 56 at Olathe (see pages 239-248), Olathe Lake near Olathe (see pages 249-258), Arkansas River near Coolidge (see pages 304-309), Rattlesnake Creek near Zenith (see pages 349-358), Little Arkansas River at Highway 50 near Halstead (see pages 369-378), Little Arkansas River near Sedgwick (see pages 379-388), North Fork Ninnescah River above Cheney Reservoir (see pages 397-406), and Cheney Reservoir near Cheney (see pages 407-414). Complete records of specific conductance, pH, water temperature, dissolved oxygen, and turbidity are published except for the station on the Arkansas River near Coolidge where only specific conductance and water temperature data were collected during the 2001 water year. Maximum, minimum, and mean values for each sensor are published for these stations. The median daily value is published for pH because mean daily pH has been found to bias the results toward lower pH. Data for days when water-quality sensors were fouled by debris or accumulation of deposits are not published. If enough data were available, a mean daily value is estimated. Kansas water-quality standards established by the Kansas Department of Health and Environment have been established for pH (not less than 6.5 and not greater than 9.0) and for dissolved oxygen (not less than 5 mg/L). Table 6 shows days when the median daily pH or daily

mean dissolved oxygen exceeded these standards. A graph of mean daily dissolved oxygen for Cedar Creek at Highway 56 at Olathe is shown in figure 9. Data for water-quality stations, as well as information about surfacewater stations, are available on the World Wide Web at:

http://ks.water.usgs.gov/Kansas/rtqw

Table 6. Days when median daily pH and mean daily dissolved oxygen exceeded Kansas water-quality standards at selected streamflow-gaging stations, 2001 water year

[mg/L, milligrams per liter]

	Station identification number and name	Median daily pH greater than or equal to 9.0 or less than 6.5 standard units	Mean daily dissolved oxygen less than or equal to 5.0 mg/L
06887500	Kansas River at Wamego	none	none
06889000	Kansas River at Topeka	Aug. 19, 20	none
06892350	Kansas River at DeSoto	Aug. 18, 19	none
06892440	Cedar Creek at Highway 56 at Olathe	none	Oct. 4, 16-21, Nov. 4, May 27-29, June 26-28, July 26, 27, Aug. 11-13, 15-17
06892450	Olathe Lake near Olathe	none	May 22-26, 31, June 1, 2, 4, 6, 8, 9, 20-22, July 13-17
07142575	Rattlesnake Creek near Zenith	none	none
07143672	Little Arkansas River at Highway 50 near Halstead	none	June 10, 11, 22-24, Sept. 15, 16
07144100	Little Arkansas River near Sedgwick	none	none
07144780	North Fork Ninnescah River above Cheney Reservoir	Sept. 24-30	Aug. 1
07144790	Cheney Reservoir near Cheney	none	July 15, Sept. 6

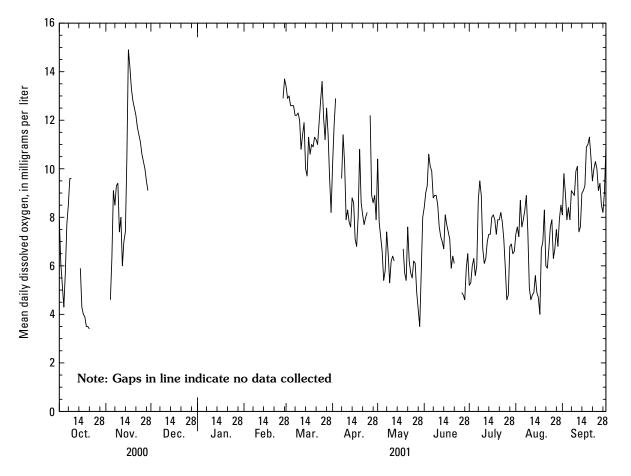


Figure 9. Mean daily dissolved oxygen for Cedar Creek at Highway 56 at Olathe, 2001 water year.

Ground Water

Ground-water levels in Harvey County and Douglas County observation wells did not change substantially during the 2001 water year (fig. 10). The Thomas County well (fig. 10) was 2 ft below last year's water level. Lack of significant precipitation in northwest Kansas during the 2000 water year and prior to the January 2001 measurement and the effects of regional ground-water pumpage, which has been occurring since the 1960s, contributed to the decrease in water level. Ground-water elevations are published for wells in the *Equus* Beds Ground Water Recharge Demonstration Project in Wichita and are shown beginning on page 508. Data for the project, as well as information about selected surface-water stations, are available on the World Wide Web at:

http://ks.water.usgs.gov/Kansas/equus

SPECIAL NETWORKS AND PROGRAMS

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead Federal agency, the U.S. Geological Survey works together with more than 100 organizations to accomplish the following objectives: (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites; (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in sulfur dioxide emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred; (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for sulfur dioxide and nitrous oxide scheduled to begin in 2000.

The two NADP/NTN monitoring sites for which data are given in this report are located at Scott Lake State Park in Scott County (see pages 521-522) and Farlington State Fish Hatchery in Crawford County (see pages 523-525). Data from the network, as well as information about individual sites, are available through the World Wide Web at:

http://nadp.sws.uiuc.edu/

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 2001 water year that began October 1, 2000, and ended September 30, 2001. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, elevation and content data for lakes or reservoirs, water-quality data for surface- and ground-water and precipitation stations, and ground-water-level data. The locations of the stations where the data were collected are shown in figures 1-4 (see pages 2-5). The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station-Identification Numbers

Each data station in this report, whether stream site or well or precipitation site, is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for complete-record and partial-record streamflow-gaging stations, and the "latitude-longitude" system is used for wells and, in Kansas, for streamflow-gaging stations where only miscellaneous measurements are made.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indention in the "List of Surface-Water Stations" in the front of this report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record streamflow-gaging stations and other stations; therefore,

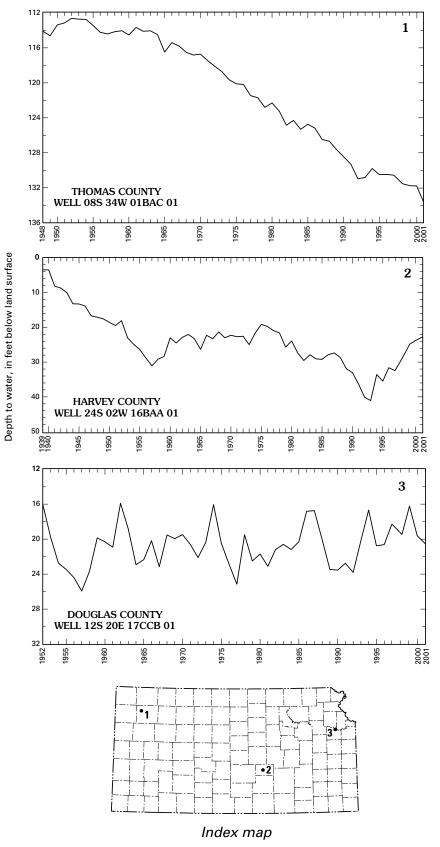
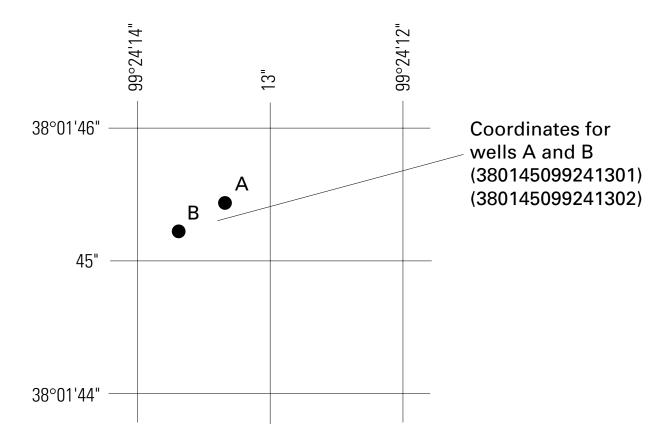


Figure 10. Water levels in selected water-level observation wells.

the station number for a partial-record streamflow-gaging station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 07144300, which appears just to the left of the station name, includes the two-digit part number "07" plus the six-digit downstream-order number "144300." The part number designates the major river basin; for example, part "07" is the Lower Mississippi River Basin.

Latitude-Longitude System

The identification numbers for wells and miscellaneous streamflow-gaging stations are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This station-identification number, once assigned, is a pure number, and has no locational significance. In the rare instance where the initial determinations of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description (see figure below).



Records of Elevation and Water Discharge

Records of elevation and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of

lake or reservoir content, similarly, are those for which elevation or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device but need not be. Because daily mean discharges and end-of-day elevations commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "High-flow partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Locations of all complete-record and partial-record streamflow-gaging stations for which data are given in this report are shown in figures 1 and 3 on pages 2 and 4, respectively.

Data Collection and Computation

The data obtained at a complete-record streamflow-gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relation between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of elevation and of notations regarding factors that may affect the relation between elevation and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas or lake storage.

Continuous records of stage are obtained with analog or electronic recorders that either record stage on paper charts or tapes or store the stage in electronic data loggers at selected intervals. Measurements of discharge are made with current meters using methods adapted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and the U.S. Geological Survey Techniques of Water-Resources Investigations (TWRI) Book 3, Chapters A1 through A19, and Book 8, Chapters A2 and B2. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (ISO).

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow-over-dam or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors that are based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relation that daily mean discharges must be estimated from other information such as temperatures and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some streamflow-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves or tables defining the relation of elevation and content. The application of elevation to the elevation-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the elevation-content relation changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relation. Even when this is done, the contents computed may become increasingly in error as time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relations much as other stream discharges are computed.

For some gaging stations there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes or orifice lines are plugged, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

Streamflow data in this report are presented in a format that is considerably different from the format in data reports prior to the 1991 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each complete-record streamflow-gaging station consist of four parts, the manuscript or station description; the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that includes statistical data of annual, daily, and instantaneous flows as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station manuscript

The manuscript provides, under various headings, descriptive information, such as location, period of record, historical extremes outside the period of record, record accuracy, and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each complete record of discharge or lake content. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--Information on location is obtained from the most accurate maps available. The location of the gaging stations with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which records have been published for the station or for an equivalent station. An equivalent station is one that was in operation at a time when the present station was not and whose location was such that flow at it can reasonably be considered equivalent to flow at the present station.

REVISED RECORDS.--Because of new information, published records occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means revised, and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to sea level (see "Definition of Terms"), and a condensed history of the types, locations, and datums of previous gages is given under this heading.

REMARKS.--All periods of estimated daily discharge will be either identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to mean discharge data for the

period of record, to extreme data for the period of record and the current year, and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the U.S. Geological Survey by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by humans. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030; 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the Kansas District office of the Geological Survey (address given on the back of the title page of this report) to determine if the published records were ever revised after the station was discontinued. Of course, if the data for a discontinued station were obtained by computer retrieval, the data would be current, and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for streamflow-gaging stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

Headings for MEAN DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR have been deleted, and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

Data table of daily mean values

The daily table of discharge records for complete-record streamflow-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed "TOTAL" gives the sum of the daily figures for each month, the line headed "MEAN" gives the average flow in cubic feet per second for the month, and the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. At some stations, monthly and (or) annual observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS _______, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of annual, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated periods selected, "WATER YEARS _____-," will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow-duration-curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each complete record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the annual mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes. At least 5 complete years of record must be available before this statistic is published for the designated period.

HIGHEST ANNUAL MEAN .-- The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1 to March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day, 10-year low-flow statistic.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period.

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicates the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

- 10 PERCENT EXCEEDS.--The discharge that is exceeded by 10 percent of the flow for the designated period.
- 50 PERCENT EXCEEDS.--The discharge that is exceeded by 50 percent of the flow for the designated period.
- 90 PERCENT EXCEEDS.--The discharge that is exceeded by 90 percent of the flow for the designated period.

Hydrograph

A hydrograph for the current water year follows the summary statistics table for most stations. Streamflow hydrographs are a semi-log plot of daily mean values in cubic feet per second, with days of no flow being blank. Lake hydrographs are a rectangular plot of elevations, in feet, at 2400 hours.

Data collected at partial-record streamflow-gaging stations follow the information for complete-record streamflow-gaging stations. Data for partial-record streamflow-gaging stations include the annual maximum stage and discharge at the high-flow partial-record streamflow-gaging stations. The tables of partial-record streamflow-gaging stations are followed by a listing of discharge measurements made at stations other than complete-record streamflow-gaging stations or partial-record streamflow-gaging stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are all measurements at miscellaneous stations.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated."

Accuracy of the Records

The accuracy of streamflow data depends primarily on: (1) The stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretations of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true discharge; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 cubic feet per second ($\rm ft^3/s$); to the nearest tenth between 1.0 and 10 $\rm ft^3/s$; to whole numbers between 10 and 1,000 $\rm ft^3/s$; and to three significant figures for more than 1,000 $\rm ft^3/s$. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile, and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated.

Other Records Available

The U.S. Geological Survey collects precipitation data at many of the complete-record streamflow-gaging stations. These data are not published. For information about this precipitation data, contact the Kansas office of the Geological Survey (address given on the back of the title page of this report).

The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 22092, maintains an index of sites as well as an index of records of discharge collected by other agencies but not published by the Geological Survey. Information on records at specific sites can be obtained from that office upon request.

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables are on file in the Kansas office of the Geological Survey. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the Kansas office of the Geological Survey (see address on back of the title page).

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near streamflow-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report include continuous records of specific conductance, pH, temperature, dissolved oxygen, and turbidity, and miscellaneous onsite measurements of specific conductance and water temperature. Instruments used for turbidity measurements presented in this report conform to ISO 7027. Locations of all complete-record water-quality stations and suspended-sediment stations for which data are given in this report are shown in figure 2 on page 3. Methods used for operation, maintenance, record computation, and reporting are described by Wagner and others (2000) and are available on the World Wide Web at http://water.usgs.gov/pubs/wri/wri004252/

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A <u>complete-record station</u> is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A <u>partial-record station</u> is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A <u>miscellaneous</u> sampling site is a location other than a complete- or partial-record station where random samples are collected to give better areal coverage to define water-quality conditions in the stream basin.

A careful distinction needs to be made between "complete records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values recorded at short intervals in a data logger. Some records of water quality, such as specific conductance, pH, water temperature, dissolved oxygen, and turbidity are obtained through continuous recordings; and the miscellaneous water-quality samples are collected on about a 6-week schedule. Locations of stations for which water-quality data are given in this report are shown in figure 2 and are available on the World Wide Web at http://ks.water.usgs.gov/nwis and http://ks.water.usgs.gov/Kansas/rtqw

Accuracy of the Records

For each record, one accuracy rating classifications is applied for measured physical properties at complete-record stations on a scale ranging from poor to excellent. The accuracy rating is based on data values recorded before any shifts or corrections are made, as described by Wagner and others (2000). Additional consideration also is given to the amount of publishable record and to the amount of data that have been corrected or shifted.

Table 7. Ratings for complete water-quality records [≤, less than or equal to; ±, plus or minus value shown; °C, degree Celsius; > greater than; %, percent; mg/L, milligram per liter; unit, standard pH unit]

Measured physical	Ratings					
property	Excellent	Good	Fair	Poor		
Specific conductance pH Water temperature Dissolved oxygen Turbidity	$\leq \pm 3\%$ $\leq \pm 0.2 \text{ unit}$ $\leq \pm 0.2 \text{ °C}$ $\leq \pm 0.3 \text{ mg/L}$ $\leq \pm 5\%$	> ± 3 to 10% > ± 0.2 to 0.5 unit > ± 0.2 to 0.5 °C > ± 0.3 to 0.5 mg/L > ± 5 to 10%	> ± 10 to 15% > ± 0.5 to 0.8 unit > ± 0.5 to 0.8 °C > ± 0.5 to 0.8 mg/L > ± 10 to 15%	> ± 15% > ± 0.8 unit > ± 0.8 °C > ± 0.8 mg/L > ± 15%		

Arrangement of Records

Water-quality records collected at a complete-record streamflow-gaging station are published immediately following that record. Station number and name are the same for both records. Where a complete-record streamflow-gaging station is not available or where the water quality differs significantly from that at the

nearby streamflow-gaging station, the complete water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

Onsite Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represent the in-situ quality of the water. To assure this, certain measurements, such as pH, water temperature, and dissolved oxygen, need to be made onsite when the samples are collected. To assure that measurements made in the laboratory also represent the in-situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in TWRI Book 1, Chapter D2; Book 3, Chapters A1, A2, and A4; and Book 9, Chapters A1-A9.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary considerably with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors that must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH onsite and determination of carbonate and bicarbonate in the laboratory.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are measured at the time of discharge measurements for streamflow-gaging stations. Conversions of degrees Celsius to degrees Fahrenheit are shown in table 4 (see page 14). Water temperatures measured at the time of water-discharge measurements are on file in the Kansas office of the Geological Survey. Large streams have small diurnal temperature changes; shallow streams may have a daily range of several degrees, and water temperatures may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-intergrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross section.

Suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream. Methods used in the computation of sediment records are described in TWRI Book 3, Chapters C1 and C3. These methods are consistent with ASTM standards and generally follow ISO standards.

In addition to the records of suspended-sediment concentrations, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Daily samples for specific conductance, pH, temperature, dissolved oxygen, and turbidity are analyzed locally. All other samples are analyzed in the Geological Survey laboratories in Denver, Colorado, or the sediment laboratory in Iowa City, Iowa. Methods used to analyze sediment samples and to compute sediment records are described in TWRI, Book 5, Chapter C1. Methods used by the Geological Survey laboratories are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, A4, and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

Data Presentation

For complete-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for properties currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the complete-record streamflow-gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each complete-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See "Data Presentation" under "Records of Elevation and Water Discharge"; same comments apply.

DRAINAGE AREA.--See "Data Presentation" under "Records of Elevation and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of properties measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the properties individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for constituents measured daily or more frequently. None are given for properties measured weekly or less frequently because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made in the U.S. Geological Survey's distributed data system, NWIS, and subsequently to its webbased national data system, NWISweb [http://water.usgs.gov/nwis/nwis]. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from NWIS or NWISweb to ensure the most recent updates. Updates to NWISweb are currently made on an annual basis.

The surface-water-quality records for partial-record stations, suspended-sediment sample stations, and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

RINTED OUTPUT	REMARK
Е	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
M	Presence of material verified but not quantified.

NOTE.--Sample handling procedures at all National Trends Network stations were changed substantially on January 11, 1994, to reduce contamination from the sample shipping container. The data for samples before and after that date are different and not directly comparable. A tabular summary of the differences, based on a special intercomparison study, is available from the NADP Program Office, Illinois State Water Survey, 2204 Griffith Drive, Champaign, IL 61820-7495 (217-333-7873).

Records of Ground-Water Levels

Water-level data from a basic network of observation wells in the *Equus* Beds aquifer in Harvey and Sedgwick Counties are shown in this report. These data were collected for the *Equus* Beds Ground-Water Recharge Demonstration Project. Also shown in this report are water-level data for wells in Douglas, Harvey, Stafford, and Thomas Counties collected for the National Water Conditions report. Locations of ground-water wells for which data are given in this report are shown in figure 4 on page 5.

Data Collection and Computation

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude, and (2) a local number that is provided for local needs. See figure on page 18.

Water-level records are obtained from either direct measurements with a steel tape or from a water-stage recorder. Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements are of consistent accuracy and reliability.

Tables of water-level data are shown beginning on page 505. Information describing the well location and physical characteristics is shown in the descriptive table headings above each data table.

The water-level measurements shown on pages 505 and 506 are given in feet with reference to land-surface datum. Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the elevation of the land-surface datum is given in the well description. The height of the measuring point above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported every 5 days and at the end of each month or daily 1200-hour readings are shown in table form. The water-level measurements shown on pages 507-520 are given in sea-level elevations.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the well description and the table of water levels observed during the water year. The description of the well is presented either by descriptive table headings or by a narrative statement. A table of water levels follows the well description. Water levels are reported in feet below land-surface datum, and all taped measurements of water levels are listed. For wells equipped with recorders, only abbreviated tables are published--generally, only water levels for every fifth day at 1200 hours and at the end of the month. The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table.

ACCESS TO USGS WATER DATA

The U.S. Geological Survey provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry, historic daily-mean and peak-flow discharge data, for most current or discontinued gaging stations as well as water-quality and ground-water data through the World Wide Web (WWW). These data may be accessed at:

http://ks.water.usgs.gov/nwis

Data can be provided in various machine-readable formats. Information about the availability of specific types of data or products, and user charges, can be obtained locally from the Kansas office of the Geological Survey (See address on the back of the title page).

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

Acre-foot (AC-FT, acre-ft) is a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also "Annual runoff")

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes ATP an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Alkalinity is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

Annual runoff is the total quantity of water that is discharged ("runs off") from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 to September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

Aroclor is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type and the last two digits represent the weight percent of the hydrogen substituted chlorine.

Artificial substrate is a device that is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection. (See also "Substrate")

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500 °C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m³), and periphyton and benthic organisms in grams per square meter (g/m²). (See also "Biomass")

Bacteria are microscopic unicellular organisims, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peaks per year will be published.

Base flow is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

Bedload is material in transport that is supported primarily by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to an elevation equal to the top of the bedload sampler nozzle (ranging from 0.25 to 0.5 ft) that are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler may also contain a component of the suspended load.

Bedload discharge (tons per day) is rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also "Bedload" and "Sediment")

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed. (See also "Bedload" and "Sediment")

Benthic organisms are the group of organisms inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as mass per unit area or volume of habitat.

Biomass pigment ratio is an indicator of the total proportion of periphyton which are autotrophic (plants). This is also called the Autotrophic Index.

Blue-green algae (*Cyanophyta*) are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Bottom material (See "Bed material")

Cells/volume refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, and are generally reported as cells or units per milliliter (mL) or liter (L).

Cells volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm³) is determined by obtaining critical cell measurements on cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

sphere $4/3 \pi r^3$ cone $1/3 \pi r^3 h$ cylinder $\pi r^3 h$.

pi is the ratio of the circumference to the diameter of a circle; pi = 3.14159...

From cell volume, total algal biomass expressed as biovolume (µm³/mL) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes over all species.

Cfs-day (See "Cubic foot per second-day")

- **Chemical oxygen demand** (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with BOD or with carbonaceous organic pollution from sewage or industrial wastes. [See also "Biochemical oxygen demand (BOD)"]
- **Clostridium perfringens** (*C. perfringens*) is a spore-forming bacterium that is common in the feces of human and other warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and presence of microorganisms that are resistant to disinfection and environmental stresses. (See also "Bacteria")
- **Coliphages** are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of waters and of the survival and transport of viruses in the environment.
- **Color unit** is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.
- **Confined aquifer** is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases, the water level can rise above the ground surface, yielding a flowing well. (See also "Aquifer")
- **Contents** is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.
- **Continuous-record station** is a site where data are collected with sufficient frequency to define daily mean values and variations within a day.
- **Control** designates a feature in the channel downstream from a gaging station that physically influences the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.
- **Control structure** as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.
- **Cubic foot per second** (CFS, ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term "second-feet" sometimes is used synonymously with "cubic feet per second" but is now obsolete.
- **Cubic foot per second-day** (CFS-DAY, Cfs-day, [(ft³/s)/d]) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily-mean discharges reported in the daily-value data tables are numerically equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.
- **Cubic foot per second per square mile** [CFSM, (ft³/s)/mi²] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area. (See also "Annual runoff")
- **Daily mean suspended-sediment concentration** is the time-weighted concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also "Daily mean suspended-sediment concentration," "Sediment," and "Suspended-sediment concentration")
- **Daily-record station** is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to periodic sample or data collection on a daily or near-daily basis.
- **Data Collection Platform** (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.
- **Data logger** is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data are usually downloaded from onsite data loggers for entry into office data systems.

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or UTM coordinates. (See also "Gage datum," "Land-surface datum," "National Geodetic Vertical Datum of 1929," and "North American Vertical Datum of 1988")

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or flow, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediments or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, etc., within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents such as suspended sediment, bedload, and dissolved or suspended chemical constituents, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal and State agencies that collect water-quality data. Determinations of "dissolved" constituent concentrations are made on sample water that has been filtered.

Dissolved oxygen (DO) is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved-solids concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO₃) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index (H) (Shannon Index) is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth's surface that contains a drainage system with a common outlet for its surface runoff. (See "Drainage area")

Dry mass refers to the mass of residue present after drying in an oven at 105 °C, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass. (See also "Ash mass," "Biomass," and "Wet mass")

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue. (See also "Wet weight")

Enterococcus bacteria are commonly found in the feces of humans and other warm-blooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 °C on mE agar and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis*, *Streptococcus feacium*, *Streptococcus avium*, and their variants. (See also "Bacteria")

EPT Index is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that are generally considered pollution sensitive, the index usually decreases with pollution.

Escherichia coli (E. coli) are bacteria present in the intestine and feces of warm-blooded animals. E. coli are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium. Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Estimated (E) value of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an 'E' code even though the measured value is greater than the MDL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<).

Euglenoids (*Euglenophyta*) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark. (See also "Phytoplankton")

Extractable organic halides (EOX) are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semi-volatile and extractable by ethyl acetate from air-dried streambed sediments. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediments.

Fecal coliform bacteria are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory, they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5 °C plus or minus 0.2 °C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Fecal streptococcal bacteria are present in the intestine of warm-blooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Fire algae (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also "Phytoplankton")

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usu-

ally slightly larger than the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any National geodetic datum. However, if the elevation of the gage datum relative to the National datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the National datum by adding the elevation of the gage datum to the gage reading.

Gage height (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used in reference to a reading on a gage.

Gage values are values that are recorded, transmitted and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

Gaging station is a site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other hydrologic data are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Habitat quality index is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO₃).

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA web site: http://www.co-ops.nos.noaa.gov/tideglos.html

Hilsenhoff's Biotic Index (HBI) is an indicator of organic pollution which uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = sum \frac{(n)(a)}{N}$$

where n is the number of individuals of each taxon, a is the tolerance value of each taxon, and N is the total number of organisms in the sample.

Horizontal datum (See "Datum")

Hydrologic benchmark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a benchmark station may be used to separate effects of natural from human-induced changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped benchmark basin.

Hydrologic index stations referred to in this report are four continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the USGS. Each hydrologic unit is identified by an 8-digit number.

Inch (IN., in.), as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were uniformly distributed on it. (See also "Annual runoff")

Instantaneous discharge is the discharge at a particular instant of time. (See also "Discharge")

Laboratory Reporting Level (LRL) is generally equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a non-detection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually based on the most current quality-control data and may, therefore, change. [Note: In several previous NWQL documents (Connor and others, 1998; NWQL Technical Memorandum 98.07, 1998), the LRL was called the non-detection value or NDV—a term that is no longer used.)

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation

$$I = I_0 e^{-\lambda L}$$

where I_o is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light attenuation coefficient is defined as

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_o} .$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Long-Term Method Detection Level (LT-MDL) is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. See NOAA web site: http://www.co-ops.nos.noaa.gov/tideglos.html

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that are usually arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Mean concentration of suspended sediment (Daily mean suspended-sediment concentration) is the timeweighted concentration of suspended sediment passing a stream cross section during a given time period. (See also "Daily mean suspended-sediment concentration" and "Suspended-sediment concentration")

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period. (See also "Discharge")

Mean high or low tide is the average of all high or low tides, respectively, over a specific period.

Mean sea level is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also "Datum")

Measuring point (MP) is an arbitrary permanent reference point from which the distance to water surface in a well is measured to obtain water level.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymphadult.

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (UG/G, μ g/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG, μg/kg) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, μ g/L) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, μ S/cm) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in water as the mass (milligrams) of constituent per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

Minimum Reporting Level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method (Timme, 1995).

Miscellaneous site, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

- Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.
- National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations, it does not necessarily represent local mean sea level at any particular place. See NOAA web site: http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88 (See "North American Vertical Datum of 1988")
- **Natural substrate** refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also "Substrate.")
- **Nekton** are the consumers in the aquatic environment and consist of large free-swimming organisms that are capable of sustained, directed mobility.
- **Nephelometric turbidity unit** (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of Formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.
- **North American Vertical Datum of 1988 (NAVD 1988)** is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the U.S. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and U.S. first-order terrestrial leveling networks.
- **Open or screened interval** is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.
- **Organic carbon** (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediments. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).
- **Organic mass** or volatile mass of the living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "Ash mass," "Biomass," and "Dry mass")
- **Organism count/area** refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m²), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.
- **Organism count/volume** refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.
- **Organochlorine compounds** are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.
- **Parameter code** is a 5-digit number used in the USGS computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.
- **Partial-record station** is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.
- **Particle size** is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method utilizes the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, Sedigraph) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).
- **Particle-size classification**, as used in this report, agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Si	ze (m	m)	Method of analysis	
Clay Silt	0.00024 0.004	-	0.004 0.062	Sedimentation Sedimentation	
Sand Gravel	0.062 2.0	-	2.0 64.0	Sedimentation/sieve Sieve	

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Peak flow (peak stage) is an instantaneous local maximum value in the continuous time series of stream-flows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation to the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

Percent composition or **percent of total** is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, mass, or volume.

Percent shading is determined by using a clinometer to estimate left and right bank shading. The values are added together and divided by 180 to determine percent shading relative to a horizontal surface.

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measurements are made one or more times during a year, but at a frequency insufficient to develop a daily record.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7 are termed "acidic," and solutions with a pH greater than 7 are termed "basic." Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

Phytoplankton is the plant part of the plankton. They are usually microscopic, and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and are commonly known as algae. (See also "Plankton")

Picocurie (PC, pCi) is one trillionth (1 x 10⁻¹²) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7 x 10¹⁰ radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL of sample).

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated naphthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [mg C/ (m²/time)] for periphyton and macrophytes or per volume [mg C/(m³/time)] for phytoplankton. Carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [mg O/ (m²/time)] for periphyton and macrophytes or per volume [mg O/(m³/time)] for phytoplankton. Oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period. (See also "Primary productivity")

Radioisotopes are isotopic forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Recoverable from bed (bottom) material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. (See also "Bed material")

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or non-exceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance. Similarly, the 7-day 10-year low flow (7Q₁₀) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the non-exceedances of the 7Q₁₀ occur less than 10 years after the previous non-exceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous non-exceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in

any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

Return period (See "Recurrence interval")

River mileage is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council, and typically used to denote location along a river.

Runoff is the quantity of water that is discharged ("runs off") from a drainage basin in a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also "Annual runoff")

Sea level, as used in this report, refers to one of the two commonly used national vertical datums, (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums. See conversion of units page (inside back cover) for identification of the datum used in this report.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

Seven-day 10-year low flow (7Q10) is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-run average. The recurrence interval of the 7Q10 is 10 years; the chance that the annual 7-day minimum flow will be less than the 7Q10 is 10 percent in any given year. (See also "Recurrence interval" and "Annual 7-day minimum")

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-

solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stable isotope ratio (per MILL/MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific waters, to evaluate mixing of different waters, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage (See "Gage height")

Stage-discharge relation is the relation between the water-surface elevation, termed stage (gage height), and the volume of water flowing in a channel per unit time.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Substrate Embeddedness Class is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2mm, sand or finer). Below are the class categories expressed as percent covered by fine sediment:

0 < no gravel or larger substrate

1 > 75%

2 51-75% 4 5-25% 3 26-50% 5 < 5%

Surface area of a lake is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

Surficial bed material is the upper surface (0.1 to 0.2 ft) of the bed material such as that material which is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is operationally defined as the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended water-sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of "suspended, recoverable" constituents are made either by directly analyzing the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "Suspended")

Suspended sediment is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also "Sediment")

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

Suspended-sediment discharge (tons/day) is the rate of sediment transport, as measured by dry mass or volume, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

Suspended-sediment load is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. The term needs to be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It is not synonymous with either suspended-sediment discharge or concentration. (See also "Sediment")

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

Suspended solids, total residue at 105 °C concentration is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

Synoptic studies are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxa richness is the total number of distinct species or groups and usually decreases with pollution. (See also "Percent Shading")

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata*, is the following:

Kingdom: Animal
Phylum: Arthropoda
Class: Insecta

Order: Ephemeroptera Family: Ephemeridae Genus: *Hexagenia*

Species: Hexagenia limbata

Temperature preferences:

Cold – preferred water temperature for the species is less than 20 °C or spawning temperature preference less than 16 °C and native distribution is considered to be predominantly north of 45 °N. latitude.

Warm – preferred water temperatures for the species is greater than 20 °C or spawning temperature preference greater than 16 °C and native distribution is considered to be predominantly south of 45 °N. latitude.

Cool – intermediate between cold and warm water temperature preferences.

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table descriptions and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (acre-foot) of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

Total is the amount of a given constituent in a representative whole-water (unfiltered) sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined at least 95 percent of the constituent in the sample.)

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warm-blooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory,

these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total in bottom material is the amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total length (fish) is the straight-line distance from the anterior point of a fish specimen's snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total organism count is the number of organisms collected and enumerated in any particular sample. (See also "Organism count/volume.")

Total recoverable is the amount of a given constituent in a whole-water sample after a sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

Total sediment discharge is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also "Sediment," "Suspended sediment," "Suspended-Sediment Concentration," "Bedload," and "Bedload discharge")

Total sediment load or total load is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It differs from total sediment discharge in that load refers to the material whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also "Sediment," "Suspended-Sediment Load," and "Total load")

Trophic group:

Filter feeder – diet composed of suspended plant and/or animal material.

Herbivore – diet composed predominantly of plant material.

Invertivore – diet composed predominantly of invertebrates.

Omnivore - diet composed of at least 25-percent plant and 25-percent animal material.

Piscivore – diet composed predominantly of fish.

Turbidity is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to EPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments

are unlikely to yield equivalent values. Consequently, the method of measurement and type of instrument used to derive turbidity records should be included in the "REMARKS" column of the Annual Data Report.

Ultraviolet (UV) absorbance (absorption) at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of pathlength of UV light through a sample.

Vertical datum (See "Datum")

Volatile organic compounds (VOCs) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

Water table is the level in the saturated zone at which the pressure is equal to the atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which is found the water table.

Water year in USGS reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2001, is called the "2001 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports. (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976.)

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

Wet mass is the mass of living matter plus contained water. (See also "Biomass" and "Dry mass")

Wet weight refers to the weight of animal tissue or other substance including its contained water. (See also "Dry weight")

WSP is used as an acronym for "Water-Supply Paper" in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers. (See also "Plankton")

DISCONTINUED STREAMFLOW-GAGING STATIONS

The following complete-record streamflow-gaging stations in Kansas have been discontinued, converted to partial-record streamflow-gaging stations, or are now operated by other Federal agencies prior to the 2001 water year. Daily streamflow or stage records were collected and published for the period of record shown for each station.

[Letters in parentheses () after station name designates type of data: (d) discharge, mi², square miles.]

Station number	Station name	Drainage area (mi ²)	Period of record
	Wolf River Basin		
06815600	Wolf River near Hiawatha, KS (d)	41.00	1961-70
06818200	Doniphan Creek at Doniphan, KS (d)	4.15	1960-70
	Kansas River Basin		
06827000 06844700 06845000	South Fork Republican River near CO-KS St Line, KS (d) South Fork Sappa Creek near Brewster, KS (d) Sappa Creek near Oberlin, KS (d)	1,860.00 74.00 1,063.00	1946-56 1968-87 1929-32
06846000	Beaver Creek at Ludell, KS (d)	1,460.00	1944-72 1929-32 1946-53
06846300	Beaver Creek at Herndon, KS (d)	1,535.00	1963-69
06854500	Republican River at Scandia, KS (d)	22,903.00	1919-25 1928-44 1951-72
06855000 06855500 06855800 06855900	West Buffalo Creek near Jewell, KS (d) West Buffalo Creek at Jewell, KS (d) Buffalo Creek near Jamestown, KS (d) Wolf Creek near Concordia, KS (d)	15.20 16.80 330.00 56.00	1934-38 1935-38 1959-90 1962-81
06857000	Republican River at Milford, KS (d)	24,900.00	1895-05
06858000 06858500	Rose Creek near Wallace, KS (d) North Fork Smoky Hill River near McAllaster, KS (d)	28.50 670.00	1951-64 1946-53 1947-53
06859500 06860500	Ladder Creek below Chalk Creek near Scott City, KS (d) Hackberry Creek near Gove, KS (d)	1,460.00 426.00	1959-84 1951-79 1947-53
06862000 06862500 06863000 06863300 06863900	Smoky Hill River at Cedar Bluff Dam, KS (d) Smoky Hill River near Ellis, KS (d) Smoky Hill River at Pfeifer, KS (d) Big Creek near Ogallah, KS (d) North Fork Big Creek near Victoria, KS (d)	5,530.00 5,630.00 6,033.00 297.00 54.00	1952-90 1942-52 1929-32 1956-68 1962-87
06863990 06864000 06866000 06867500	Big Creek near Russell, KS (d) Smoky Hill River near Russell, KS (d) Smoky Hill River at Lindsborg, KS (d) Paradise Creek near Paradise, KS (d)	824.00 6,965.00 8,110.00 212.00	1963-64 1940-74 1930-65 1946-53 1963-74
06868000	Saline River near Wilson, KS (d)	1,900.00	1929-63
06868400 06868500 06868700 06870500 06871900	Wolf Creek near Lucas, KS (d) Wolf Creek near Sylvan Grove, KS (d) NB Spillman Creek near Ash Grove, KS (d) Smoky Hill River near New Cambria, KS (d) Deer Creek near Phillipsburg, KS (d)	163.00 261.00 26.10 1,980.00 65.00	1959-71 1946-53 1962-71 1949-53 1967-81
06872300 06873500	Middle Beaver Creek near Smith Center, KS (d) South Fork Solomon River at Alton, KS (d)	71.00 1,720.00	1961-70 1919-25 1928-32 1942-57
06873700 06874500 06875000	Kill Creek near Bloomington, KS (d) East Limestone Creek near Ionia, KS (d) Elm Creek near Ionia, KS (d)	52.00 25.60 22.70	1963-81 1934-38 1934-38

WATER RESOURCES DATA - KANSAS, 2001

DISCONTINUED STREAMFLOW-GAGING STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Period of record
	Kansas River BasinContinued		
06875500 06875800 06876000 06876440 06877000	East Limestone Creek at Ionia, KS (d) Limestone Creek near Glen Elder, KS (d) Solomon River at Beloit, KS (d) Solomon River near Minneapolis, KS (d) Smoky Hill River at Solomon, KS (d)	51.60 210.00 5,530.00 6,060.00 8,830.00	1934-35 1965-71 1929-65 1978-83 1919-21
06877500 06878500 06879000 06879200 06879500	Turkey Creek near Abilene, KS (d) Lyon Creek near Woodbine, KS (d) Smoky Hill River at Junction City, KS (d) Clark Creek near Junction City, KS (d) Kansas River at Ogden, KS (d)	143.00 230.00 19,900.00 200.00 45,240.00	1923-34 1959-65 1954-74 1952-57 1958-65 1917-26 1927-51
06882500	Big Blue River at Hull, KS (d)	4,540.00	1919-25 1928-40
06884500	Little Blue River at Waterville, KS (d)	3,509.00	1920-40 1922-25 1928-58
06885000 06886000 06886500	Snipe Creek near Beattie, KS (d) Big Blue River at Randolph, KS (d) Fancy Creek at Winkler, KS (d)	18.00 9,100.00 174.00	1954-58 1918-60 1954-71
06888300 06888925 06889100 06889120	Vermillion Creek near Wamego, KS (d) Rock Creek near Louisville, KS (d) Unnamed Creek near Kansas Museum of History, Topeka, K Soldier Creek near Goff, KS (d) Soldier Creek near Bancroft, KS (d)	243.00 128.00 (S (d) 3.56 2.06 10.50	1936-46 1954-72 1959-65 1995-98 1964-87 1964-88
06889140 06889160 06889180 06889580	Soldier Creek near Soldier, KS (d) Soldier Creek near Circleville, KS (d) Soldier Creek near St. Clere, KS (d) Shunganunga Creek at Southwest 29th Street, Topeka, KS (16.90 49.30 80.00 d) 14.10	1964-98 1964-01 1964-81 1979-81 1994-96
06889610	South Branch Shunganunga Creek at Southwest 37th Street Topeka, KS (d)	11.60	1979-81 1994-96
06889700	Shunganunga Creek at Rice Road, Topeka, KS (d)	60.30	1979-83
06890000	Little Delaware River near Horton, KS (d)	19.00	1993-96 1954-61 1962-65 1977-78
06890400 06890500 06890600	Delaware River near Arrington, KS (d) Delaware River at Valley Falls, KS (d) Rock Creek near Meriden, KS (d)	738.00 922.00 22.00	1965-69 1922-67 1963-70
06891483 06891486 06891488 06891490 06892490	Wakarusa River below Clinton Dam, KS (d) West Branch Yankee Tank Creek near Lawrence, KS (d) East Branch Yankee Tank Creek near Lawrence, KS (d) Yankee Tank Creek near Lawrence, KS (d) Cedar Creek near Cedar Junction, KS (d)	412.00 1.85 1.35 3.90 38.90	1973-80 1969-73 1969-73 1969-73 1965-68
06892500 06893350	Kansas River at Bonner Springs, KS (d) Tomahawk Creek near Overland Park, KS (d)	59,928.00 23.90	1917-73 1974-82
	Osage River Basin		
06911000 06912000 06914000 06914500 06914960	Marais des Cygnes River at Melvern, KS (d) Switzler Creek at Burlingame, KS (d) Pottawatomie Creek near Garnett, KS (d) Pottawatomie Creek at Lane, KS (d) Rock Creek near Wellsville, KS (d)	351.00 26.30 334.00 513.00 15.90	1940-74 1954-61 1939-01 1929-32 1993-96

DISCONTINUED STREAMFLOW-GAGING STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Period of record
	Osage River BasinContinued		
06915977 06915988 06916000 06916500	North Sugar Creek below La Cygne Lake, KS (d) North Sugar Creek near Trading Post, KS (d) Marais des Cygnes River at Trading Post, KS (d) Big Sugar Creek at Farlinville, KS (d)	56.67 72.13 2,880.00 198.00	1979-82 1981-81 1929-58 1929-32 1949-58 1959-70
06917500	Marmaton River near Fort Scott, KS (d)	408.00	1921-25 1929-71
	Arkansas River Basin		
07138062	Arkansas River below Amazon Dv, KS (d) Arkansas River at Lakin, KS (d) White Woman Creek near Leoti, KS (d) White Woman Creek 4.2 miles S of Leoti, KS (d) Mulberry Creek near Dodge City, KS (d)	26,099.00	1978-83
07138065		27,838.00	1978-83
07138650		750.00	1967-86
07138660		834.00	1979-80
07139800		73.80	1968-90
07170500	Arkansas River at Larned, KS (d) Guzzlers Gulch near Ness City, KS (d) Walnut Creek near Heizer, KS (d) Rattlesnake Creek near Raymond, KS (d) Arkansas River at Hutchinson, KS (d)	31,750.00	1922-40
07140700		58.20	1961-81
07142015		1,486.00	1974-78
07142620		1,167.00	1960-98
07142800		37,869.00	1895-05
07142860	Cow Creek near Claflin, KS (d)	43.00	1967-81
07142900	Blood Creek near Boyd, KS (d)	61.00	1962-80
07143400	Arkansas River near Wichita, KS (d)	39,072.00	1922-35
07143600	Little Arkansas River near Little River, KS (d)	71.00	1960-72
07144000	East Emma Creek near Halstead, KS (d)	58.00	1963-71
07144601	North Fork Ninnescah River at Arlington, KS (d)	322.00	1996-00
07144660	Silver Creek near Arlington, KS (d)	194.00	1996-00
07144680	Goose Creek near Arlington, KS (d)	46.60	1996-00
07144730	Red Rock Creek near Pretty Prairie, KS (d)	53.20	1996-00
07144800	North Fork Ninnescah River near Cheney, KS (d)	930.00	1951-64
07144850	South Fork South Fork Ninnescah River near Pratt, KS (d)	21.00	1961-80
07146570	Cole Creek near DeGraff, KS (d)	30.00	1961-80
07146623	Walnut River below El Dorado Lake, KS (d)	247.00	1981-90
07146830	Walnut River at Highway 54 east of El Dorado, KS (d)	350.00	1981-98
07146895	Walnut River at Augusta, KS (d)	452.00	1982-85
07146990	Whitewater River 3 miles S of Potwin, KS (d)	162.00	1968-69
07147050	WB Whitewater River near Furley, KS (d) WB Whitewater River near Benton, KS (d) Whitewater River at Augusta, KS (d) Timber Creek near Wilmot, KS (d)	88.00	1968-69
07147060		177.00	1968-69
07147100		456.00	1951-55
07147600		63.00	1962-68
07147900	Walnut River near Arkansas City, KS (d) North Fork Cimarron River at Richfield, KS (d) Sand Arroyo Creek near Johnson, KS (d) Bear Creek near Johnson, KS (d) Bear Creek 9 miles NE of Johnson, KS (d)	1,952.00	1902-03
07156010		463.00	1971-86
07156100		619.00	1971-86
07156220		835.00	1966-98
07156225		879.00	1979-80
07156500 07156800	Cimarron River near Satanta, KS (d) Cimarron River near Liberal, KS (d)	7,345.00 8,254.00	1942-46 1896-96 1938-42
07157740	Cimarron River near Buttermilk, KS (d)	11,120.00	1973-79
07157900	Cavalry Creek at Coldwater, KS (d)	39.00	1967-82
07157940	Bluff Creek near Buttermilk, KS (d)	657.00	1973-80

DISCONTINUED STREAMFLOW-GAGING STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Period of record
	Arkansas River BasinContinued	d	
07165700	Verdigris River near Madison, KS (d)	181.00	1956-76
07165750	Verdigris River near Virgil, KS (d)	312.00	1989-98
07166000	Verdigris River near Coyville, KS (d)	747.00	1939-98
07167000	Fall River near Eureka, KS (d)	307.00	1947-76
07168500	Fall River near Fall River, KS (d)	585.00	1939-90
07170000	Elk River near Elk City, KS (d) Caney river near Cedar Vale, KS (d) Middle Caney Creek at Sedan, KS (d) Bee Creek near Havana, KS (d) Four Mile Creek near Council Grove, KS (d)	575.00	1939-69
07171600		208.00	1989-98
07173300		119.00	1989-98
07173500		11.00	1955-58
07179600		55.00	1963-72
07179710	Neosho River near Dunlap, KS (d) Cottonwood River near Marion, KS (d) Cottonwood River at Marion, KS (d) Cottonwood River at Elmdale, KS (d) Middle Creek near Elmdale, KS (d)	528.00	1985
07180000		329.00	1939-68
07180200		502.00	1984-99
07181000		1,045.00	1923-32
07181500		92.00	1939-50
07182000	Cottonwood River at Cottonwood Falls, KS (d) Neosho River at Strawn, KS (d) Owl Creek near Piqua, KS (d) Neosho River near Chanute, KS (d) Cherry Creek near Hallowell, KS (d)	1,327.00	1932-71
07182400		2,933.00	1949-63
07183100		177.00	1959-70
07183200		4,195.00	1963-75
07184300		90.00	1976-82
07184500	Labette Creek near Oswego, KS (d) Cow Creek near Weir, KS (d)	211.00	1939-45
07186040		170.00	1976-82

DISCONTINUED WATER-QUALITY STREAMFLOW-GAGING STATIONS

The following complete-record water-quality streamflow-gaging stations in Kansas have been discontinued prior to the 2001 water year. Records of specific conductance, pH, temperature, dissolved oxygen, or sediment were collected and published for the record shown for each station. Discontinued stations for which periodic records of water quality are available from the U.S. Geological Survey office in Lawrence, Kansas are not included in this list.

[mi², square miles]

Station number	Station name	Drainage area (mi ²)	Type of record ¹	Period of record
	Kansas River Bas	in		
06827000 06845000	South Fork Republican River near CO-KS St Line, KS Sappa Creek near Oberlin, KS	1,860.00 1,063.00	Sed. Sed.	1948-49 1962-64 1967-69
06846500 06847950 06848000	Beaver Creek at Cedar Bluffs, KS Keith Sebelius Lake near Norton, KS Prairie Dog Creek at Norton, KS	1,618.00 683.00 684.00	Temp., Sed. Temp., S.C., pH, D.O. Temp., Sed.	1961-69
06853500 06854000 06854500	Republican River near Hardy, NE White Rock Creek at Lovewell, KS Republican River at Scandia, KS	22,401.00 345.00 22,903.00	S.C. Temp. Temp., S.C., Sed.	1956-57 1950-54 1957-58 1968-70
06856600 06857000	Republican River at Clay Center, KS Republican River at Milford, KS	24,542.00 249.00	NASQAN Temp., S.C.	1973-93 1955-58
06861500 06862500 06862700 06863300 06866900	Cedar Bluff Res near Ellis, KS Smoky Hill River near Ellis, KS Smoky Hill River near Schoenchen, KS Big Creek near Ogallah, KS Saline River near WaKeeney, KS	5,530.00 5,630.00 5,750.00 297.00 696.00	Temp., S.C., pH, D.O. Sed. S.C. Temp., S.C., Sed. Temp., S.C., Sed.	1962-82 1947-50 1965-70 1955-62 1955-59
06867000	Saline River near Russell, KS	1,502.00	Temp., S.C., Sed.	1946-51 1964-70
06867500	Paradise Creek near Paradise, KS	212.00	Temp., S.C., Sed.	1948-51 1964-66
06868000 06868500 06869500	Saline River near Wilson, KS Wolf Creek near Sylvan Grove, KS Saline River at Tescott, KS	1,900.00 261.00 2,820.00	Temp., S.C. Temp., Sed. Temp., S.C., Sed.	1948-51 1947-50 1949-53 1958-75
06870200	Smoky Hill River at New Cambria, KS	1,730.00	Temp., S.C., Cl., Sed.	1962-68 1973-82
06871800 06872500 06873500 06874000	North Fork Solomon River at Kirwin, KS North Fork Solomon River at Portis, KS South Fork Solomon River at Alton, KS South Fork Solomon River at Osborne, KS	1,367.00 2,315.00 1,720.00 2,012.00	Temp., Sed. MRB Temp., Sed. NASQAN	1950-52 1962-96 1946-52 1962-94
06876000	Solomon River at Beloit, KS	5,530.00	Temp., S.C., Sed.	1948-52 1957-58
06876440 06876900 06877500 06877600	Solomon River near Minneapolis, KS Solomon River at Niles, KS Turkey Creek near Abilene, KS Smoky Hill River at Enterprise, KS	6,060.00 6,770.00 143.00 19,260.00	Temp., S.C., pH, D.O. Temp., S.C., Cl., Sed. Sed. Temp., S.C., Cl., Sed. NASQAN	1978-83 1957-82 1958-59
06878000 06878500 06879200 06879650 06884400	Chapman Creek near Chapman, KS Lyon Creek near Woodbine, KS Clark Creek near Junction City, KS Kings Creek near Manhattan, KS Little Blue River near Barnes, KS	300.00 230.00 200.00 4.09 3,324.00	Sed. Sed. Sed. Benchmark Temp., S.C., pH, D.O.	1958-59 1958-59 1958-59 1980-96 1976-90

DISCONTINUED WATER-QUALITY STREAMFLOW-GAGING STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Type of record ¹	Period of record
	Kansas River BasinC	Continued		
06887000 06887500	Big Blue River near Manhattan, KS Kansas River at Wamego, KS	9,640.00 5,280.00	NASQAN Temp., S.C., Sed.	1956-58 1962-86 1956-75
06888000 06889000 06889610	Vermillion Creek near Wamego, KS Kansas River at Topeka, KS South Branch Shunganunga Creek at SW 37th St,	243.00 56,720.00 11.60	Temp. Temp., S.C.	1958-63 1955-58 1980-81
06889700 06890000 06890500 06891490 06891500	Topeka, KS Shunganunga Creek at Rice Rd, Topeka, KS Little Delaware River near Horton, KS Delaware River at Valley Falls, KS Yankee Tank Creek near Lawrence, KS Wakarusa River near Lawrence, KS	58.70 19.00 922.00 3.90 425.00	D.O. Temp., S.C. Sed. Temp., S.C. Sed. Sed.	1980-81 1977-78 1957-59 1970-73 1958-59
06892000 06892350 06892500	Stranger Creek near Tonganoxie, KS Kansas River at DeSoto, KS Kansas River at Bonner Springs, KS	406.00 59,756.00 59,928.00	Sed. NASQAN Temp., S.C.	1957-59 1975-86 1961-63
	Osage River Ba	sin		
06913500 06915988	Marais des Cygnes River near Ottawa, KS North Sugar Creek near Trading Post, KS	1,250.00 72.13	Temp., S.C. Temp., S.C.	1961-68 1980-81
	Arkansas River B	asin		
07137500	Arkansas River near Coolidge, KS	25,410.00	NASQAN	1964-68 1970-73 1975-95
07139500 07140000 07141900 07142620	Arkansas River at Dodge City, KS Arkansas River near Kinsley, KS Walnut Creek at Albert, KS Rattlesnake Creek near Raymond, KS	30,600.00 31,066.00 1,410.00 1,167.00	NASQAN Temp., Sed. Temp., Sed. S.C.	1974-77 1960-75 1963-75 1969-70
07143330 07144200 07144550 07144800 07145200	Arkansas River near Hutchinson, KS Little Arkansas River at Valley Center, KS Arkansas River at Derby, KS North Fork Ninnescah River near Cheney, KS South Fork Ninnescah River near Murdock, KS	38,910.00 1,327.00 40,830.00 930.00 650.00	Temp., S.C., Sed. Temp., Sed. Temp., S.C Temp. Temp., S.C.	1960-76 1957-61 1969-76 1950-51 1950-73
07145500 07146500 07146990 07147050 07147060	Ninnescah River near Peck, KS Arkansas River at Arkansas City, KS Whitewater River 3 miles S of Potwin, KS West Branch Whitewater River near Furley, KS West Branch Whitewater River near Benton, KS	2,129.00 43,713.00 162.00 88.00 177.00	Temp. NASQAN S.C. S.C. S.C.	1951 1952-88 1967-69 1967-69 1967-69
07147070 07147800 07148600	Whitewater River at Towanda, KS Walnut River at Winfield, KS Medicine Lodge River at Sun City, KS	426.00 1,880.00 335.00	Temp., S.C. Temp., S.C., Sed. Temp., S.C., Cl.	1961-69 1961-75 1954-79 1987-99
07149000	Medicine Lodge River near Kiowa, KS	903.00	Temp., S.C., Cl.	1954-55 1973-79
07151300	Chikaskia River near Spivey, KS	315.00	Temp., S.C., CI.	1988-99
07151500 07157500 07157740 07157940 07170500	Chikaskia River near Corbin, KS Crooked Creek near Nye, KS Cimarron River near Buttermilk, KS Bluff Creek near Buttermilk, KS Verdigris River at Independence, KS	794.00 1,157.00 1,120.00 657.00 2,892.00	Temp., Sed. Temp. Temp., S.C., Cl. Temp., Cl. Temp., S.C.	1962-65 1946-47 1973-79 1973-79 1961-68
07183500 07184070 07184100 07184220 07184240	Neosho River near Parsons, KS Deer Creek near Hallowell, KS Lightning Creek near Oswego, KS Cherry Creek near West Mineral, KS Little Cherry Creek near West Mineral, KS	4,905.00 7.00 250.00 27.00 34.00	NASQAN Temp., S.C. Temp., S.C. Temp., S.C. Temp., S.C.	1962-94 1977-79 1977-79 1977 1977

DISCONTINUED WATER-QUALITY STREAMFLOW-GAGING STATIONS--Continued

Station number	Station name	Drainage area (mi ²)	Type of record ¹	Period of record
	Arkansas River B	asinContinued		
07184300 07186010 07186040 07186050	Cherry Creek near Hallowell, KS Second Cow Creek at Pittsburg, KS Cow Creek near Weir, KS Brush Creek near Weir, KS	90.00 60.00 170.00 30.00	Temp., S.C. Temp., S.C. Temp., S.C. Temp., S.C.	1977-79 1977-79 1977-80 1977-79

¹Type of record: Temp. (temperature), S.C. (specific conductance), D.O. (dissolved oxygen), Cl. (chloride), Sed. (sediment), Benchmark, MRB (Missouri River Basin), NASQAN (National Stream Quality Accounting Network).

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals and reports describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Branch of Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

<u>Techniques of Water-Resources Investigations</u>

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

- 1-D1. Water temperature—influential factors, field measurement, and data presentation, by H. H. Stevens, Jr., J.F. Ficke, and G. F. Smoot: USGS–TWRI book 1, chap. D1. 1975. 65 pages.
- 1-D2. Guidelines for collection and field analysis of ground-water samples for selected unstable constituents, by W.W. Wood: USGS-TWRI book 1, chap. D2. 1976. 24 pages.

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

- 2-D1. Application of surface geophysics to ground-water investigations, by A.A. R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS-TWRI book 2, chap. D1. 1974. 116 pages.
- 2-D2. Application of seismic-refraction techniques to hydrologic studies, by F.P. Haeni: USGS-TWRI book 2, chap. D2. 1988. 86 pages.

Section E. Subsurface Geophysical Methods

- 2-E1. Application of borehole geophysics to water-resources investigations, by W.S. Keys and L.M. MacCary: USGS-TWRI book 2, chap. E1. 1971. 126 pages.
- 2-E2. Borehole geophysics applied to ground-water investigations, by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 pages.

Section F. Drilling and Sampling Methods

2-F1. Application of drilling, coring, and sampling techniques to test holes and wells, by Eugene Shuter and W.E. Teasdale: USGS–TWRI book 2, chap. F1. 1989. 97 pages.

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

- 3-A1. General field and office procedures for indirect discharge measurements, by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method,* by Tate Dalrymple and M.A. Benson: USGS-TWRI book 3, chap. A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods,* by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS-TWRI book 3, chap. A4. 1967. 44 pages.

- 3-A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS–TWRI book 3. chap. A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 pages.
- 3-A7. Stage measurement at gaging stations, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel in streams by dye tracing,* by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS-TWRI book 3, chap. A9. 1989. 27 pages.
- 3-Al0. Discharge ratings at gaging stations, by E.J. Kennedy: USGS-TWRI book 3, chap. A10. 1984. 59 pages.
- 3-A11. *Measurement of discharge by the moving-boat method,* by G.F. Smoot and C.E. Novak: USGS—TWRI book 3, chap. A11. 1969. 22 pages.
- 3-A12. Fluorometric procedures for dye tracing, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 pages.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge,* by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 pages.
- 3-A15. Computation of water-surface profiles in open channels, by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 pages.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS-TWRI book 3, chap. A16. 1985. 52 pages.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS-TWRI book 3, chap. A17. 1985. 38 pages.
- 3-A18. Determination of stream reaeration coefficients by use of tracers, by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS-TWRI book 3, chap. A18. 1989. 52 pages.
- 3-A19. Levels at streamflow gaging stations, by E.J. Kennedy: USGS-TWRI book 3, chap. A19. 1990. 31 pages.
- 3-A20. Simulation of soluable waste transport and buildup in surface waters using tracers, by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 pages.
- 3-A21 Stream-gaging cableways, by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 pages.

Section B. Ground-Water Techniques

- 3-B1. Aquifer-test design, observation, and data analysis, by R.W. Stallman: USGS–TWRI book 3, chap. B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS-TWRI book 3, chap. B2. 1976. 172 pages.
- 3-B3. Type curves for selected problems of flow to wells in confined aquifers, by J.E. Reed: USGS–TWRI book 3, chap. B3. 1980. 106 pages.
- 3-B4. Regression modeling of ground-water flow, by R.L. Cooley and R.L. Naff: USGS-TWRI book 3, chap. B4. 1990. 232 pages.

- 3-B4. Supplement 1. Regression modeling of ground-water flow --Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems, by R.L. Cooley: USGS—TWRI book 3, chap. B4. 1993. 8 pages.
- 3-B5. Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 pages.
- 3-B6. The principle of superposition and its application in ground-water hydraulics, by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS-TWRI book 3, chap. B6. 1987. 28 pages.
- 3-B7. Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow, by E.J. Wexler: USGS–TWRI book 3, chap. B7. 1992. 190 pages.

Section C. Sedimentation and Erosion Techniques

- 3-C1. Fluvial sediment concepts, by H.P. Guy: USGS-TWRI book 3, chap. C1. 1970. 55 pages.
- 3-C2. Field methods for measurement of fluvial sediment, by T.K. Edwards and G.D. Glysson: USGS—TWRI book 3, chap. C2. 1999. 89 pages.
- 3-C3. Computation of fluvial-sediment discharge, by George Porterfield: USGS–TWRI book 3, chap. C3. 1972. 66 pages.

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

- 4-A1. Some statistical tools in hydrology, by H.C. Riggs: USGS-TWRI book 4, chap. A1. 1968. 39 pages.
- 4-A2. Frequency curves, by H.C. Riggs: USGS-TWRI book 4, chap. A2. 1968. 15 pages.

Section B. Surface Water

- 4-B1. Low-flow investigations, by H.C. Riggs: USGS-TWRI book 4, chap. B1. 1972. 18 pages.
- 4-B2. Storage analyses for water supply, by H.C. Riggs and C.H. Hardison: USGS–TWRI book 4, chap. B2. 1973. 20 pages.
- 4-B3. Regional analyses of streamflow characteristics, by H.C. Riggs: USGS–TWRI book 4, chap. B3. 1973. 15 pages.

Section D. Interrelated Phases of the Hydrologic Cycle

4-D1. Computation of rate and volume of stream depletion by wells, by C.T. Jenkins: USGS–TWRI book 4, chap. D1. 1970. 17 pages.

Book 5. Laboratory Analysis

Section A. Water Analysis

- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments,* by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI book 5, chap. A1. 1989. 545 pages.
- 5-A2. Determination of minor elements in water by emission spectroscopy, by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI book 5, chap. A2. 1971. 31 pages.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI book 5, chap. A3. 1987. 80 pages.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples,* by L.J. Britton and P.E. Greeson, editors: USGS–TWRI book 5, chap. A4. 1989. 363 pages.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments,* by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI book 5, chap. A5. 1977. 95 pages.

5-A6. Quality assurance practices for the chemical and biological analyses of water and fluvial sediments, by L.C. Friedman and D.E. Erdmann: USGS–TWRI book 5, chap. A6. 1982. 181 pages.

Section C. Sediment Analysis

5-C1. Laboratory theory and methods for sediment analysis, by H.P. Guy: USGS–TWRI book 5, chap. C1. 1969. 58 pages.

Book 6. Modeling Techniques

Section A. Ground Water

- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 pages.
- 6-A2. Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model, by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 pages.
- 6-A3. A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual, by L.J. Torak: USGS-TWRI book 6, chap. A3. 1993. 136 pages.
- 6-A4. A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions, by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 pages.
- 6-A5. A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details, by L.J. Torak: USGS–TWRI book 6, chap. A5, 1993. 243 pages.
- 6-A6. A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction, by Eric D. Swain and Eliezer J. Wexler: USGS-TWRI book 6, chap. A5,1996. 125 pages.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

- 7-C1. Finite difference model for aquifer simulation in two dimensions with results of numerical experiments, by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 pages.
- 7-C2. Computer model of two-dimensional solute transport and dispersion in ground water, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 pages.
- 7-C3. A model for simulation of flow in singular and interconnected channels, by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI book 7, chap. C3. 1981. 110 pages.

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

- 8-A1. *Methods of measuring water levels in deep wells*, by M.S. Garber and F.C. Koopman: USGS—TWRI book 8, chap. A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS—TWRI book 8, chap. A2. 1983. 57 pages.

Section B. Instruments for Measurement of Discharge

8-B2. Calibration and maintenance of vertical-axis type current meters, by G.F. Smoot and C.E. Novak: USGS-TWRI book 8, chap. B2. 1968. 15 pages.

Book 9. Handbooks for Water-Resources Investigations

Section A. National Field Manual for the Collection of Water-Quality Data

- 9-A1. National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.
- 9-A2. National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A2. 1998. 94 p.
- 9-A3. National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A3. 1998. 75 p.
- 9-A4. National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.
- 9-A5. National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS-TWRI book 9, chap. A5. 1999, 149 p.
- 9-A6. National Field Manual for the Collection of Water-Quality Data: Field Measurements, edited by F.D. Wilde and D.B. Radtke: USGS-TWRI book 9, chap. A6. 1998. Variously paginated.
- 9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*, edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.
- 9-A8. National Field Manual for the Collection of Water-Quality Data: Bottom-material samples, by D.B. Radtke: USGS-TWRI book 9, chap. A8. 1998. 48 pages.
- 9-A9. National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities, by S.L. Lane and R.G. Fay: USGS-TWRI book 9, chap. A9. 1998. 60 pages.

Other Reports

Horowitz, A.J., Demas, C.R., Fitzgerald, K.K., Miller, T.L., and Rickert, D.A., 1994, U.S. Geological Survey protocol for collection and processing of surface-water samples for the subsequent determination of inorganic constituents in filtered water: U.S. Geological Survey Open-File Report 94-539, 57 p.

Wagner, R.J., Mattraw, H.C., Ritz, G.F., and Smith, B.A., 2000, Guidelines and standard procedures for ontinous water-quality monitors: site selection, field operation, calibration, record computation, and reporting: U.S. Geological Survey Water-Resources Investigations Report 00-4252, 53 p.

56 MISSOURI RIVER BASIN

BIG NEMAHA RIVER BASIN

06814000 TURKEY CREEK NEAR SENECA, KS

LOCATION.--Lat $39^{\circ}56^{\circ}52^{\circ}$, long $96^{\circ}06^{\circ}30^{\circ}$, in SW $^{1}/_{4}$ NW $^{1}/_{4}$ Sec.20, T.1 S., R.12 E., Nemaha County, Hydrologic Unit 10240007, on left bank at downstream side of county highway bridge, 2.0 mi downstream from Clear Creek, 5.0 mi upstream from Big Nemaha River, and 8.0 mi northwest of Seneca.

DRAINAGE AREA.--276 \min^2 . PERIOD OF RECORD.--October 1948 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,037.53 ft above sea level. Prior to Oct. 19, 1956, water-stage recorder (occasional operation only) and nonrecording gage on former channel 400 ft south of present site at present datum. Oct. 19, 1956, to June 15, 1957, nonrecording gage at highway bridge 1.2 mi upstream at different datum. June 16, 1957, to Mar. 27, 1958, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,100 ft^3/s and maximum (*):

				_	_		_					
Date	Tim	e	Discharge (ft ³ /s)	Gag	ge height (ft)		Date	Time	e	Discharge (ft ³ /s)	Gage	e height (ft)
Feb 24 Mar 12 May 6 Jun 4 Jun 5	151 061 051 071 231	5 5 5	5,760 5,650 4,600 6,920 4,820		19.29 19.09 17.17 21.23 17.60		Jul 12 Jul 28 Sep 15 Sep 17	1419 0919 1619 1530	5 5	4,370 5,840 3,640 *9,400	-	16.73 19.43 15.25 22.68
	DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.23 .30 .19 .15	23 9.9 3.9 2.4 1.8	2.4 2.6 2.7 2.4 3.7	e.75 e1.0 e1.7 e1.9 e2.1	e2.5 e2.4 e3.4 e4.4 e4.4	153 157 136 205 474	113 72 53 44 93	13 11 45 170 2830	371 435 410 5050 2960	13 12 11 9.6 7.0	111 87 75 66 59	8.2 7.5 6.9 6.1 5.4
6 7 8 9 10	1.1 .66 .33 .44 .42	9.1 17 8.5 5.2 3.5	2.4 2.6 2.5 2.5 2.0	e2.2 e2.2 e2.3 e2.6 e2.8	e4.4 e4.4 e4.0 e1.9 e1.4	472 320 218 466 635	209 94 56 37 36	2970 521 260 185 151	3150 674 373 253 188	5.6 4.8 4.0 2.9	52 45 41 36 30	6.4 63 959 108 43
11 12 13 14 15	.40 .32 .46 .94 3.2	3.1 3.4 3.4 2.9 2.8	e2.0 e1.9 e1.8 e1.6 e1.5	e3.0 e3.0 e3.0 e3.0 e3.0	e3.6 e6.0 e6.6 e4.0 e2.4	1060 3990 1390 1010 576	992 557 198 131 363	128 94 74 56 41	147 114 91 664 348	838 2430 391 158 94	27 26 26 22 25	23 15 12 9.8 1290
16 17 18 19 20	1.2 .55 .34 .28 .40	2.8 2.4 2.3 2.3 3.0	e1.5 e1.4 e1.3 e1.3	e3.0 e2.4 e2.0 e1.5 e1.6	e2.0 e3.0 e4.0 e4.7 e5.2	351 242 178 142 120	168 101 81 70 61	32 25 20 17 16	147 101 77 89 256	62 41 26 1400 628	29 31 39 25 18	1130 6850 669 374 206
21 22 23 24 25	.45 .50 2.2 .81 1.5	2.0 2.0 2.2 2.7 2.6	e1.0 e1.0 e1.2 e1.1 e1.4	e1.7 e1.8 e2.0 e1.8 e1.8	e8.0 e20 78 3910 2450	106 113 126 97 79	86 80 50 32 25	67 51 23 16 14	187 135 84 58 39	193 105 63 38 137	15 13 38 138 67	132 111 1330 214 111
26 27 28 29 30 31	2.4 1.1 1.5 8.0 4.4 3.1	2.7 3.1 2.8 2.5 2.6	e1.1 e1.2 e1.5 e1.2 e1.0 e.80	e1.8 e2.2 e3.7 e4.1 e3.8 e3.5	790 319 133 	60 53 49 46 103 125	22 19 16 13 12	9.6 8.0 15 921 1630	27 23 19 17 15	162 702 3830 521 242 158	32 19 15 12 9.9 9.0	83 75 70 65 63
MEAN MAX MIN AC-FT	1.23 8.0 .15 75	4.60 23 1.8 274	1.74 3.7 .80 107	2.36 4.1 .75 145	278 3910 1.4 15440	427 3990 46 26290	129 992 12 7700	336 2970 8.0 20680	550 5050 15 32730	398 3830 2.9 24490	39.9 138 9.0 2460	468 6850 5.4 27860

MISSOURI RIVER BASIN 57

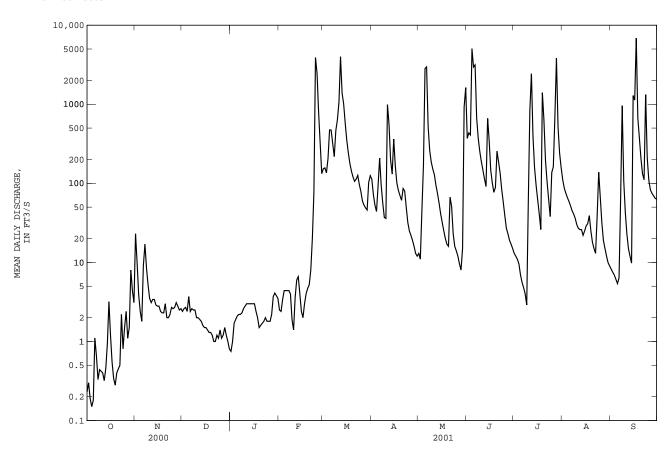
BIG NEMAHA RIVER BASIN

06814000 TURKEY CREEK NEAR SENECA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	83.6 1050 1974 .000 1957	49.3 419 1999 .000 1957	33.6 206 1974 .000 1957	40.6 310 1962 .000 1957	94.8 372 1982 .018 1957	210 1297 1979 .065 1957	180 1079 1984 .28 1956	229 1354 1995 2.43 1989	245 2067 1951 2.75 1977	209 3193 1993 .92 1989	81.8 914 1954 1.48 1988	136 1057 1958 .000 1956
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	AR YEAR	F	FOR 2001 WA	TER YEAR		WATER YE	ARS 1949	- 2001
	MEAN 'ANNUAL N ANNUAL ME			20.8			219			131 547 3.24		1993 1956
HIGHEST	DAILY ME	EAN		2240	Jul 4		6850	Sep 17		16700	Oct 1	1 1973
	DAILY MEA			.15	Oct 4		.15			.00		8 1956
		Y MINIMUM		.24	Sep 29		.40			.00		21 1956
	PEAK FLO						9400	Sep 17		21400		.1 1973
	PEAK STA						22.68			24.77		1 1973
	ANEOUS LO							Oct 4		.00	Jul 2	28 1956
ANNUAL	RUNOFF (A	AC-FT)		15120			158200			95010		
10 PERC	ENT EXCE	EDS		18			468			213		
50 PERC	ENT EXCE	EDS		4.9			18			22		
90 PERC	ENT EXCE	EDS		.51			1.3			2.1		

e Estimated



58 KANSAS RIVER BASIN

06844900 SOUTH FORK SAPPA CREEK NEAR ACHILLES, KS

LOCATION.--Lat 39°40'37", long 100°43'18", in SW $^{1}/_{4}$ SW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.29, T.4 S., R.30 W., Decatur County, Hydrologic Unit 10250010, on right bank at downstream side of county highway bridge, 5.5 mi southeast of Achilles, 14 mi southwest of Oberlin, and 18.5 mi upstream from confluence with North Fork.

DRAINAGE AREA.--446 mi^2 , of which 68 mi^2 is probably noncontributing.

PERIOD OF RECORD. -- July 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,722.42 ft above sea level.

Discharge

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals. Satellite telemeter at station.

Discharge

Gage height

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ${\rm ft}^3/{\rm s}$ and maximum (*): Gage height

Date	Tim	e D.	(ft ³ /s)	Gage	(ft)		Date	Tim	e	(ft ³ /s)		ft)
May 29	213	0	*575	*	9.60		No othe	er peak g	reater th	nan base di	scharge.	
		DISCHARG	E, CUBIC	FEET PER		WATER Y	YEAR OCTOBER VALUES	R 2000 TC	SEPTEMBE	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	2.2 .08 .01 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.13 .08 .42 4.1 6.8	.04	.63 .63 .67 1.7 2.9	4.1 2.0 1.6 1.1	.03 .02 .02 .02	.02 .02 .02 .02 .02	.00 .00 .00 .00
6 7 8 9 10	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.04 .03 .00 .00	.62 .08 .06 .05	.06 .03 .02	1.7 1.3 .84 .69	.41 .32 .29 .25	.02 .01 .00 .01	.01 .01 .00 .00	.00 .00 .00 .00
11 12 13 14 15	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.08 .07 .05 .06	.02 .02 .02	.60 .58 .57 e.54 e.52	.17 .13 .12 .09	.01 .01 .03 .04	.00 .00 .00 .00	.00 .00 .00 .00
16 17 18 19 20	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .03	.08 .08 .09 .07	.03 .03 .03	e.52 e.52 e.52 e.52 e.52	.08 .08 .07 .06	.03 .01 .00 .00	.00 .00 .00 .00	.46 .08 .94 .40
21 22 23 24 25	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .06 e.03 e.01 e.01	.06 .05 .05 .05	9.5 4.1 1.2	e.52 e.52 e.52 e.52 e.52	.07 .06 .05 .05	.00 .00 .00 1.7 3.5	.56 1.6 1.5 .70	.03 .03 .02 .01
26 27 28 29 30 31	.00 .00 .00 5.7 .78 6.5	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00 .00	e.01 .01 .03 	.06 .06 .06 .05 .03	.68 .62 .61 .61	e.53 e.53 e.54 132 117	.02 .02 .02 .03 .04	1.7 .46 .09 .03 .03	.03 .02 .01 .00 .00	.02 .02 .01 .01 .00
MEAN MAX MIN AC-FT	.42 6.5 .00 26	.076 2.2 .00 4.5	.000	.000	.010 .06 .00	.44 6.8 .03 27	9.5 .02	9.14 132 .52 562	.41 4.1 .02 24	.25 3.5 .00 16	.15 1.6 .00 9.1	.075 .94 .00 4.5

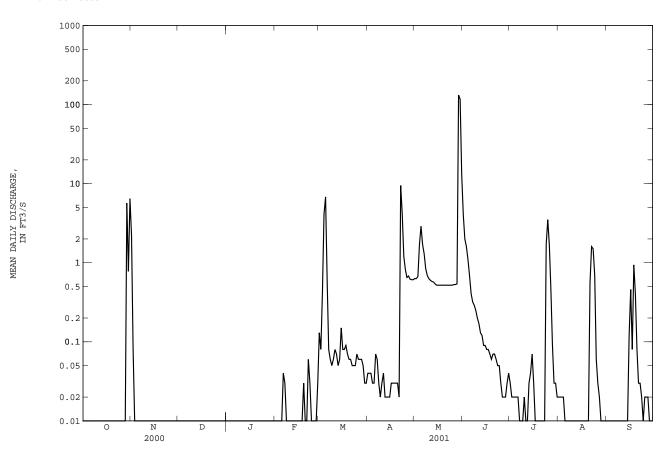
KANSAS RIVER BASIN 59

06844900 SOUTH FORK SAPPA CREEK NEAR ACHILLES, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	.97 37.9 1966 .000 1960	.20 3.78 1966 .000 1960	.20 2.48 1966 .000 1960	.32 2.78 1993 .000 1960	.97 16.4 1963 .000 1961	7.45 243 1960 .000 1961	1.49 20.0 1971 .000 1961	4.08 31.9 1981 .000 1964	12.2 200 1975 .000 1980	7.04 116 1982 .000 1961	3.64 36.9 1975 .000 1961	1.68 33.2 1965 .000 1960
SUMMARY STATISTICS			FOR 2000 CALENDAR YEAR			FOR 2001 WATER YEAR			WATER YEARS 1960 - 2001			
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT	ANNUAL MANNUAL	EAN EAN AN Y MINIMUM OW AGE OW FLOW		.11 6.5 .00	Oct 31 May 31 Jun 4		.98 132 .00 .00 575 9.60	May 29 Oct 1 Oct 1 May 29 May 29 Oct 1		3.36 27.8 .007 3060 .00 .00 5310 11.90 .00	Jun 1 Oct Oct Jun 1 Jun 1	1960 1980 19 1975 1 1959 1 1959 19 1975 15 1996 7 days
10 PERC 50 PERC	RUNOFF (A SENT EXCEINENT EXCEINENT EXCEINE	EDS EDS		80 .21 .00 .00			712 .63 .01 .00			2440 2.2 .00 .00		

e Estimated



60 KANSAS RIVER BASIN

06845000 SAPPA CREEK NEAR OBERLIN, KS

LOCATION.--Lat $39^{\circ}48^{\circ}45^{\circ}$, long $100^{\circ}32^{\circ}00^{\circ}$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.12, T.3 S., R.29 W., Decatur County, Hydrologic Unit 10250011, on left bank at downstream side of State Highway 83 bridge, 1.1 mi south of intersection of Highways 36 and 83, 3.0 mi downstream from confluence of North and South Forks, and at mile 133.6.

DRAINAGE AREA.--1,086 mi², of which 163 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1928 to September 1932. June 1944 to September 1972. October 1995 to current year. Monthly discharge only for some periods, published in WSP 1310.

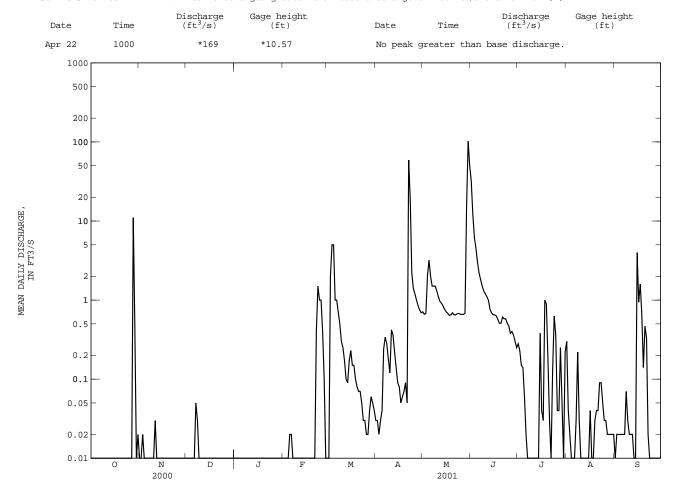
REVISED RECORDS.--WSP 1340: 1929(M), 1931, 1944(M), 1947(M), 1949, 1951(M), 1953(M).

GAGE.--Water-stage recorder. Elevation of gage 2,540 ft above sea level, from topographic map. Mar. 18, 1929, to June 30, 1932, staff gage at site 3.3 mi downstream at datum 2,522.98 ft above sea level, June 22, 1944, to June 15, 1945, wire-weight gage 150 ft downsteam of previous site at datum 2.20 ft lower. Jan. 16, 1945, to Sept. 30, 1955, water-stage recorder and concrete control 100 ft above previous wire-weight gage site at datum 2,522.50 ft above sea level. Oct. 1, 1955, to May 21, 1958, and Jan. 5 to May 15, 1959, wire-weight gage at present site at different datum. May 20, 1959, to Sept. 30, 1972, water-stage recorder at site 3.7 miles upstream at datum 2,562.07 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.—Maximum discharge, $10,600 \text{ ft}^3/\text{sec}$ July 16, 1944, (gage height 15.28 ft, site and datum then in use, from floodmark), from rating curve extended above $4,200 \text{ ft}^3/\text{sec}$ on basis of peak flow over dam; no flow at times.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):



06845000 SAPPA CREEK NEAR OBERLIN, KS--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP .71 .01 .01 e.01 e.00 .00 .01 .03 32 .28 .30 .01 .66 2 .01 .01 e.01 e.00 .00 e.01 .03 12 .23 .04 .02 e.00 .01 .02 e.01 .00 e2.0 .02 6.2 .15 .02 .02 .68 .00 4 .01 .01 e.01 .00 e5.0 .03 2.0 4.5 14 0.1 0.2 5 .01 .01 e.01 .00 .02 e5.0 .04 3.2 3.0 .06 .00 .02 .02 .02 6 7 .01 .01 e.01 .00 e1.0 .24 2.0 2.2 0.0 .02 1.8 .01 .01 e.05 .00 .01 e1.0 .34 1.5 .00 .03 .02 .01 e.03 e.70 .28 1.5 .07 8 .01 .00 .00 .00 .22 .01 9 .00 e.01 0.0 .00 e.50 .18 1.5 1.3 .00 03 03 10 .00 e.30 .00 .01 e.00 .00 .12 1.3 1.2 .00 .00 .02 .03 .00 .00 e.25 .02 11 .00 .00 .42 1.1 1.1 .00 0.1 .96 .00 .01 .00 .00 .00 e.17 . 36 .99 .76 .00 .00 .02 12 e.10 .01 13 .00 .00 .00 .09 .84 14 0.0 e.01 0.0 0.0 0.0 14 69 .01 0.0 0.1 .09 4.0 15 .00 e.01 .00 .00 .00 .17 .76 .65 .38 .00 e.01 .00 .00 .08 .71 .65 .04 16 0.0 0.0 .23 0.4 94 .05 .00 e.01 .00 .00 .00 .68 .03 .01 17 .15 .63 1.6 18 .00 e.01 .00 .00 e.00 .15 .57 1.0 .01 .64 19 0.0 e.01 0.0 0.0 e.00 10 07 65 51 .89 03 14 20 .00 .08 .09 .00 e.01 .00 .00 .69 .51 .18 .04 .47 21 .00 e.01 .00 .00 .00 .07 .05 .65 .61 .03 .04 .33 22 .00 e.01 .00 .00 e.40 .07 .65 .58 .09 .02 .01 23 .00 e.01 .00 .00 e1.5 .05 19 .67 .58 .13 .09 .00 e1.0 2.2 24 .00 e.01 .00 .00 .03 .68 .51 .63 .05 .00 25 .00 e.01 .00 .00 e1.0 .03 1.4 .66 .47 .36 .03 .01 e.01 .00 1.2 .01 26 .00 .00 e.40 .02 .66 .38 .04 .03 27 .01 e.01 .00 e.00 e.10 .02 1.0 .66 .40 .04 .02 .01 .00 .25 28 11 e.01 .00 e.01 .04 .85 .68 .36 .02 .01 .45 15 29 .02 e.01 .00 .00 .06 .75 .30 .01 ---.00 30 .00 e.01 .05 .69 102 .25 .01 .02 .01 31 .02 e.00 .00 .04 50 .22 .02 MEAN .37 .011 .005 .000 .56 2.97 6.30 2.57 .17 .039 .28 .16 .05 .00 1.5 5.0 59 .02 32 .25 .30 MAX 11 .03 102 1 0 4.0 .00 MIN .00 .64 .00 .00 23 .00 387 2.4 AC-FT 8.8 35 153 10 STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2001, BY WATER YEAR (WY) OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG 16 7 2 26 1 75 5 22 39 N 45 9 12 5 MEAN 2 93 15 1 5 62 21 1 20 1 356 33.5 9.68 31.7 403 28.3 197 MAX 16.8 189 235 594 148 (WY) 1947 1947 1947 1931 1949 1960 1931 1957 1957 1944 1949 1951 MTN 000 000 000 000 000 000 000 000 000 046 000 000 (WY) SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1929 - 2001 ANNUAL MEAN 1.17 1.12 14.7 HIGHEST ANNUAL MEAN 1951 84.2 LOWEST ANNUAL MEAN .64 1972 HIGHEST DAILY MEAN 11 Oct 28 102 May 30 5100 Mar 21 1960 .00 Oct .00 Oct 9 .00 LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM 9 Aug 29 1947 .00 Oct Jan 31 1949 MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE 169 Apr 22 1850 Jun 15 1996 10.57 Apr 22 18.16 Jun 15 1996 .00 INSTANTANEOUS LOW FLOW .00 Mar 25 1996 ANNUAL RUNOFF (AC-FT) 852 814 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 3.5 1.0

.10

.00

17

.66

.00

.02

.00

90 PERCENT EXCEEDS

e Estimated

Discharge

06845110 SAPPA CREEK NEAR LYLE, KS

LOCATION.--Lat $40^{\circ}00^{\circ}00^{\circ}$, long $99^{\circ}59^{\circ}35^{\circ}$, in NE $^{1}/_{4}$ NE $^{1}/_{4}$ NE $^{1}/_{4}$ sec.2, T.01 S., R.24 W., Norton County, Hydrologic Unit 10250011, on right bank at upstream side of county highway bridge, 11.5 mi north and 5.5 mi west of Norton, on Kansas-Nebraska State line, and at mile 66.4.

DRAINAGE AREA. -- 1,488 mi².

PERIOD OF RECORD. -- October 1995 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,240 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals and return flow from irrigated areas. Satellite telemeter at station.

Discharge

Gage height

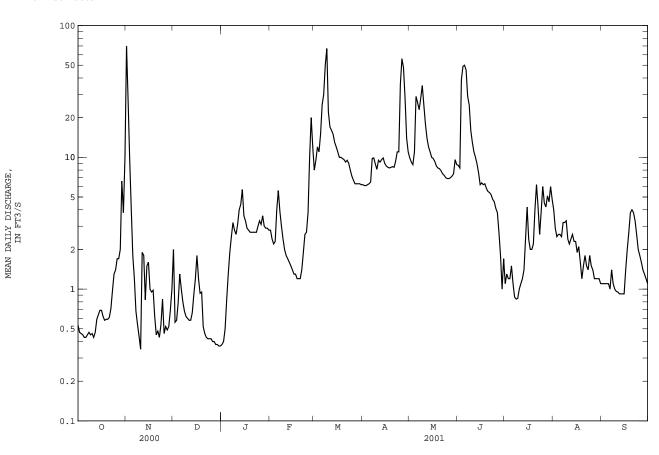
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of $250~{
m ft}^3/{
m s}$ and maximum (*): Gage height

Date	Tit	me	(ft ³ /s)	2 00	(ft)		Date	Time	9	(ft ³ /s)		(ft)
Nov 1	040	00	*88		*7.70		No peak	greater	than base	discharge.		
		DISCHA	RGE, CUBIC	C FEET P		WATER Y MEAN	YEAR OCTOBER VALUES	2000 TO	SEPTEMBER	2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.53 .47 .46 .45 .43	70 27 9.8 4.1 1.8	2.0 .56 .58 .79	e.38 e.40 e.50 .83	e2.8 e2.4 e2.2 2.3 4.0	e8.0 e9.5 e12 e11 e15		9.9 9.2 8.8 11 29	8.7 8.3 39 49 50	1.1 1.3 1.2 1.2	4.0 2.9 2.5 2.6 2.6	e1.1 e1.1 e1.1 e1.1
6 7 8 9 10	.43 .45 .47 .45 .46	1.2 .68 .54 .44 .35	1.0 .80 e.68 e.62 e.60	1.9 2.5 3.2 2.8 2.6	5.6 3.9 e3.0 e2.4 e2.0	e25 e30 e50 e67 e22	6.5 9.8 9.9 8.9	26 23 28 35 25	46 29 25 16 13	1.1 .87 .84 .85	2.5 3.2 3.2 3.3 2.4	e1.0 e1.4 e1.1 e1.0 e.96
11 12 13 14 15	.43 .47 .59 .64	1.9 1.8 .83 1.5	e.58 e.58 .66 .91	3.1 4.0 4.4 5.7 3.6	e1.8 e1.7 e1.6 e1.5 e1.4	e17 e16 e15 e13 e12	9.5 9.2 9.6 9.9 9.0	18 14 12 11	11 10 8.9 7.6 6.2	1.1 1.2 1.4 2.4 4.2	2.2 2.4 2.6 2.3 2.3	e.95 e.92 e.92 e.92
16 17 18 19 20	.69 .62 .58 .59	1.0 .95 .98 .62 .45	1.8 1.2 .93 .95	3.3 e2.9 e2.8 e2.7 e2.7	e1.3 e1.3 e1.2 e1.2	e11 e10 e10 e9.8 e9.6		9.8 9.3 8.6 8.3 8.2	6.4 6.2 6.3 5.8 5.5	2.4 2.0 2.0 2.2 4.0	1.9 2.1 1.6 1.2 1.5	e1.4 e2.0 e2.7 e3.8 e4.0
21 22 23 24 25	.61 .71 .97 1.3 1.4	.48 .43 .54 .84	e.46 e.43 e.42 e.42 e.42	e2.7 e2.7 2.7 3.0 3.3	e1.4 e1.9 e2.6 e2.7 e3.8	e9.2 e9.5 9.0 8.0 7.2	9.4 11 11	7.9 7.5 7.3 7.0 6.9	5.4 5.2 4.8 4.6 4.1	3.9	1.8 1.5 e1.4 e1.8 e1.5	e3.8 e3.3 e2.6 e2.0 e1.8
26 27 28 29 30 31	1.7 1.7 2.0 6.6 3.8	.52 .49 .52 .69	e.40 e.40 e.38 e.38 e.37 e.37	3.1 3.6 3.0 e2.9 e2.9 e2.8	e10 e20 e12 	6.7 6.3 6.3 6.3 6.3	48 28 3 14 3 11	6.9 7.0 7.2 7.5 9.6 8.8	3.8 2.7 1.8 1.0 1.7	4.2 5.1 4.6 6.0	e1.4 e1.2 e1.2 e1.2 e1.2 e1.1	e1.6 e1.4 e1.3 e1.2 e1.1
MEAN MAX MIN AC-FT	1.33 10 .43 82	4.45 70 .35 265	.73 2.0 .37 45	2.72 5.7 .38 167	3.54 20 1.2 197	14.6 67 6.2 900	56 6.1	12.8 35 6.9 789	13.1 50 1.0 780	2.77 6.2 .84 171	2.08 4.0 1.1 128	1.65 4.0 .92 98

06845110 SAPPA CREEK NEAR LYLE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	7.25 21.1 1997 1.33 2001	11.2 26.8 1997 4.45 2001	11.4 28.8 1997 .73 2001	12.3 28.0 1997 2.72 2001	14.9 29.3 1997 3.54 2001	16.5 28.7 1997 11.7 1996	16.0 27.9 1997 10.7 1996	17.1 24.6 1997 10.3 2000	37.1 153 1996 3.87 2000	17.9 53.7 1996 2.77 2001	25.1 77.9 1996 1.12 2000	9.07 34.2 1996 .60 2000
SUMMARY	STATISTI	CS.	FOR	2000 CALENI	DAR YEAR	FC	OR 2001 WA	TER YEAR		WATER YEA	RS 1996	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT ANNUAL	MEAN ANNUAL ME DAILY ME SEVEN-DAY I PEAK FLO I PEAK STA ANEOUS LO RUNOFF (2	CAN CAN MINIMUM W GE W FLOW C-FT)		6.70 70 .35 .39	Nov 1 Nov 10 Dec 25		70 .35 .38 88 7.70 .35 4410	Nov 1 Nov 10 Dec 26 Nov 1 Nov 1		16.3 33.2 6.09 642 .35 .38 786 17.46 .34 11810	Nov 1 Dec 2 Jun 2 Jun 2	1996 2001 3 1996 0 2000 6 2000 3 1996 3 1996 7 2000
50 PERC	ENT EXCEE ENT EXCEE	DS		3.2 .49			2.6 .54			11 1.8		



Discharge

06846000 BEAVER CREEK AT LUDELL, KS

LOCATION.--Lat $39^{\circ}50^{\circ}53^{\circ}$, long $100^{\circ}57^{\circ}40^{\circ}$, in SE $^{1}/_{4}$ NW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.30, T.2 S., R.32 W., Rawlins County, Hydrologic Unit 10250014 on left bank at downstream side of bridge on county highway, 0.5 mi south of Ludell, and 10.5 mi downstream from Little Beaver Creek, and at mile 147.8.

DRAINAGE AREA.--1,411 mi²

PERIOD OF RECORD.--March 1929 to June 1932, September 1945 to September 1953, annual maximum, 1961-1988. Monthy discharge only for some periods, published in WSP 1310. October 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,753.93 ft above sea level. March 1929 to June 1932 staff gage at railroad bridge 120 ft upstream from present site at datum 1.7 ft higher. September 1945 to October 1946 wire-weight gage on bridge 35 ft upstream from present site at same datum, and October 1946 to September 1953 water-stage recorder at same site and datum. August 1961 to September 1988 crest-stage gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by Atwood City Lake, ground-water withdrawals, diversions upstream for irrigation, and return flow from irrigated areas. Satellite telemeter at station

Discharge

Gage height

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of $100~{\rm ft}^3/{\rm s}$ and maximum (*):

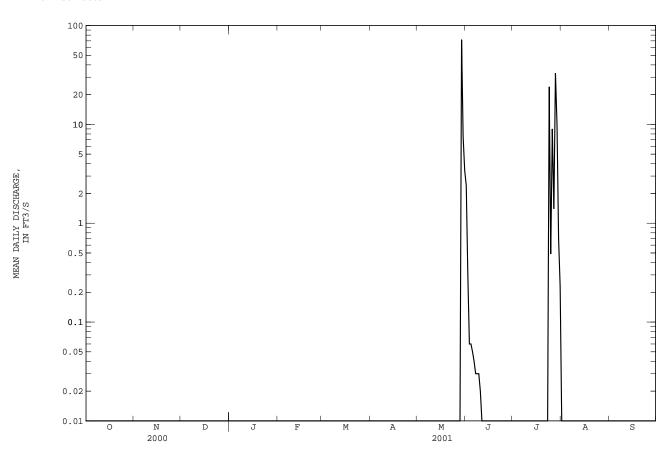
Gage height

Date	Time	e (f	$[t^3/s]$	((ft)		Date	Time		(ft^3/s)	(ft)
May 29	1430	0	*237	*	8.08		No othe	r peak gr	eater th	nan base di	scharge.	
		DISCHARGE,	CUBIC	FEET PER		WATER YEA Y MEAN VAL		2000 TO	SEPTEMBI	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	2.4 .30 .06 .06	.00 .00 .00 .00	.01 .00 .00 .00	.00 .00 .00 .00
6 7 8 9 10	.00 .00 .00 .00	.00 .00 .00 .00	.00	.00 .00 .00 .00	.00 .00 .00 e.00 e.00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.04 .03 .03 .03	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
11 12 13 14 15	.00 .00 .00 .00	.00 .00 .00 .00	.00	.00 .00 .00 .00	e.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
16 17 18 19 20	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
21 22 23 24 25	.00 .00 .00 .00	.00 .00 .00 .00	.00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 24 .49	.00 .00 .00 .00	.00 .00 .00
26 27 28 29 30 31	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 72 7.5 3.4	.00 .00 .00 .00	9.0 1.4 33 9.8 .70 .23	.00 .00 .00 .00	.00 .00 .00 .00
MEAN MAX MIN AC-FT	.000	.000 .00 .00	.000 .00 .00	.000	.000	.000	.000 .00 .00	2.67 72 .00 164	.10 2.4 .00 6.0	2.54 33 .00 156	.000 .01 .00	.000

06846000 BEAVER CREEK AT LUDELL, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	3	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	5.74 45.3 1947 .000 1999	3.84 19.5 1947 .000 1996	3.27 13.7 1947 .000 2001	3.17 13.2 1952 .000 2001	5.86 17.1 1952 .000 2001		8.30 23.8 1949 .000 2001	9.36 32.0 1949 .000 2001	15.0 53.0 1949 1.79 2000	38.6 344 1951 .034 2000	32.3 321 1951 .050 2000	20.1 93.1 1996 .000 2000	24.1 212 1951 .000 1953
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	AR YE	AR	F	OR 2001 WA	TER YEAR		WATER YEA	ARS 1930	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT	ANNUAL MANNUAL MANNUAL MAILY MEA SEVEN-DAN PEAK FLO PEAK STA PANEOUS LO	EAN EAN AN Y MINIMUM OW AGE OW FLOW		1.27 10 .00 .00	Mar Jun Jun	9 8 8		.45 72 .00 .00 237 8.08 .00	May 29 Oct 1 Oct 1 May 29 May 29 Oct 1		14.4 84.6 .45 2000 .00 .800 11.37 .00	Nov Nov May May	1951 2001 13 1951 11 1945 11 1945 24 1965 24 1965 t years
10 PERC 50 PERC	RUNOFF (A ENT EXCENT ENT EXCENT	EDS EDS		923 4.6 .00				326 .00 .00			10430 21 3.2 .00		



06846500 BEAVER CREEK AT CEDAR BLUFFS, KS

LOCATION.--Lat $39^{\circ}59^{\circ}06^{\circ}$, long $100^{\circ}33^{\circ}35^{\circ}$, in NW $^{1}/_{4}$ NE $^{1}/_{4}$ sec.10, T.1 S., R.29 W., Decatur County, Hydrologic Unit 10250014, on right bank at downstream side of bridge on U.S. Highway 83, 0.2 mi north of Cedar Bluffs, 1.0 mi south of Kansas-Nebraska State line, and at mile 107.4.

DRAINAGE AREA.--1,618 mi^2 , of which 294 mi^2 is probably noncontributing.

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS. -- WSP 1510: 1947, 1950-51.

GAGE.--Water-stage recorder. Datum of gage is 2,520.33 ft above sea level. Prior to Aug. 19, 1971, at site 0.1 mi upstream at same datum. Aug. 19, 1971, to July 12, 1972, at site 0.8 mi downstream at datum 5.00 ft lower.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1944 reached a stage of 18.16 ft, from floodmark.

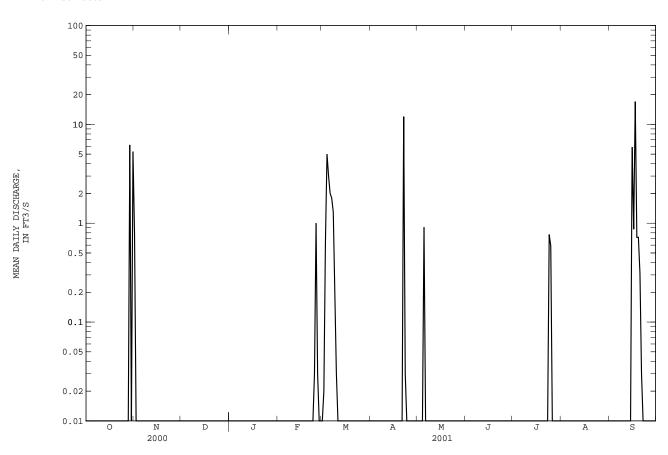
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 $\mathrm{ft^3/s}$ and maximum (*):

Date	Time	e	Discharge (ft ³ /s)		height (ft)		Date	Time		ischarge ft ³ /s)		height
Sep 17	170	0	*127	*	5.95		No peak	greater	than base	discharge.		
		DISCHA	RGE, CUBIC	FEET PER		WATER YEA Y MEAN VAI		2000 TO	SEPTEMBER	2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	.78 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	e.00 e.02 e.65 e5.0 e3.0	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
6 7 8 9 10	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	e2.0 e1.8 1.3 .20	.00 .00 .00 .00	.01 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
11 12 13 14 15	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00 5.9
16 17 18 19 20	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.87 17 .72 .72 .31
21 22 23 24 25	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 e.03 e1.0	.00 .00 .00 .00	.00 12 .03 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .77 .59	.00 .00 .00 .00	.03 .00 .00 .00
26 27 28 29 30 31	.00 .00 .01 6.2 .01 5.3	.00 .00 .00 .00	.00 .00 .00 .00 .00	.00 .00 .00 .00	e.03 e.00 e.00	.00 .00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00 .00	.00 .00 .00 .00
MEAN MAX MIN AC-FT	.37 6.2 .00 23	.026 .78 .00 1.5	.000 .00 .00	.000	.038 1.0 .00 2.1	.45 5.0 .00 28	.40 12 .00 24	.030 .91 .00 1.8	.000	.044 .77 .00 2.7	.000	.85 17 .00 51

06846500 BEAVER CREEK AT CEDAR BLUFFS, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	8.67 231 1947 .000 1954	2.86 39.6 1966 .000 1955	2.45 30.4 1966 .000 1955	2.14 28.4 1966 .000 1955	3.76 28.1 1966 .000 1956	11.5 369 1960 .000 1955	7.06 61.7 1960 .000 1955	23.0 432 1957 .000 1955	37.9 278 1960 .000 1979	29.1 391 1951 .000 1980	15.2 146 1962 .000 1955	15.7 421 1951 .000 1953
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	DAR YEAR	FC	OR 2001 WA	TER YEAR		WATER YEA	ARS 1946	- 2001
	MEAN ANNUAL M ANNUAL ME			.47			.18			13.3 106 .000)	1951 1991
LOWEST	DAILY ME	AN		6.2	Oct 29 Jan 1		17 .00			4560 .00	Sep	11 1960 3 1946
MAXIMUM	SEVEN-DAY I PEAK FLO I PEAK STA			.00	Jan 1		.00 127 5.95	Sep 17		.00 127 18.71	Sep	23 1947 17 2001 11 1960
INSTANT	ANEOUS LO	OW FLOW		342			.00			9670		t years
10 PERC 50 PERC	ENT EXCER	EDS EDS		2.0			.00			22 .01		
90 PERC	ENT EXCE	SUE		.00			.00			.00		



06847900 PRAIRIE DOG CREEK ABOVE KEITH SEBELIUS LAKE, KS

LOCATION.--Lat $39^{\circ}46'13"$, long $100^{\circ}06'00"$, in SE $^{1}/_{4}$ SE $^{1}/_{4}$ sec.23, T.3 S., R.25 W., Norton County, Hydrologic Unit 10250015, on right bank 50 ft downstream from county highway bridge, 4.0 mi east of Clayton, and at mile 90.4.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--590 mi².

PERIOD OF RECORD.--June 1962 to current year. Prior to Dec. 28, 1980, published as Prairie Dog Creek above Norton Reservoir.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,334.94 ft above sea level. Prior to Sept. 30, 1974, at datum 2.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions for irrigation upstream from station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum known flood since at least 1944, 65,500 ${\rm ft}^3/{\rm sec}$ May 28, 1953, at site 9.4 mi downstream, based on contracted-opening measurement of peak flow.

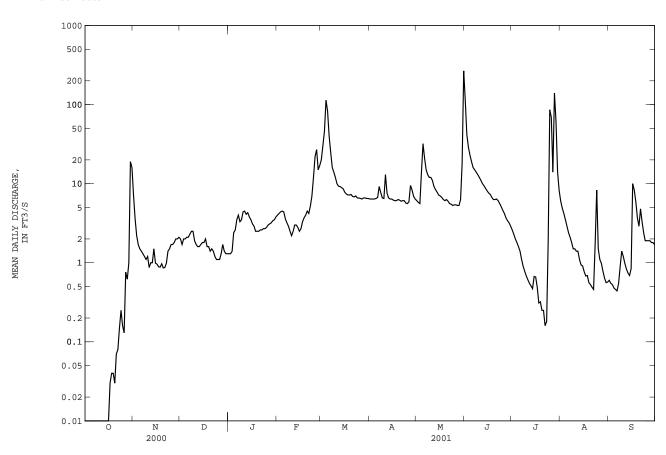
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Date	Tim	ie	Dischard (ft ³ /s)	ge Ga	ge height (ft)		Date	Tim	e	Discharge (ft ³ /s)		height (ft)
Jul 28	170	0	*353	3	*8.58		No peak	greater	than bas	se discharg	e.	
		DISCHA	RGE, CUB	IC FEET P		WATER YI Y MEAN V	EAR OCTOBER ALUES	2000 TC	SEPTEMBI	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	7.1 3.6 2.2 1.7 1.5	2.0 1.7 2.0 2.0 2.1	e1.3 e1.3 1.4 2.4 2.6	e4.0 e4.2 e4.4 e4.5 e4.4	e20 e30 46 114 83	6.4 6.4 6.4 6.5	6.1 5.8 5.6 14 32	113 42 29 23 19	2.6 2.3 2.0 1.8 1.6	6.0 4.9 4.2 3.5 2.9	.60 .55 .53 .48
6 7 8 9 10	.00 .00 .00 .00	1.4 1.3 1.2 1.1	2.1 2.3 2.5 2.5 1.9	3.5 4.0 3.3 3.5 4.4	e3.6 e3.2 e2.9 e2.5 e2.2	40 25 16 14 12	6.7 9.2 7.7 6.6 6.5	21 15 13 12 12	16 15 14 13	1.4 1.1 .90 .78 .68	2.4 2.1 1.8 1.5 1.5	.44 .55 .90 1.4 1.2
11 12 13 14 15	.00 .00 .00 .00	.87 1.0 1.0 1.5	e1.7 e1.6 e1.6 e1.7 e1.8	4.5 4.1 4.3 3.8 3.5	e2.5 e3.0 e3.0 e2.8 e2.5	10 9.3 9.2 8.9 8.6	13 7.6 6.6 6.4 6.4	11 9.2 8.4 7.8 7.2	11 10 9.4 8.7 8.1	.61 .55 .51 .47	1.4 1.4 1.1 .94 .91	.98 .83 .74 .69
16 17 18 19 20	.00 .03 .04 .04	.96 .89 .88 .97	e1.8 e2.0 e1.6 e1.6	3.1 2.9 e2.5 e2.5 e2.5	e2.7 e3.3 e3.7 e4.0 e4.5	7.8 7.4 7.2 7.2 7.3	6.2 6.1 6.1 6.3 6.2	7.0 6.7 6.3 6.1 6.3	7.6 7.3 6.7 6.3	.66 .49 .31 .32 .25	.77 .68 .69 .56	10 8.3 5.9 3.7 2.9
21 22 23 24 25	.07 .08 .15 .25	.87 .99 1.4 1.5	e1.5 e1.4 e1.2 e1.1	e2.6 e2.6 e2.7 e2.7 e2.8	e4.2 e5.2 e7.0 e12 e22	6.9 6.8 7.0 6.6 6.6	6.0 6.1 6.1 5.7 5.6	6.0 5.6 5.5 5.3 5.4	6.4 6.1 5.6 5.1 4.6	.25 .16 .18 1.9	.49 .46 1.7 8.3 1.5	4.8 3.3 2.4 1.9
26 27 28 29 30 31	.13 .76 .62 1.0 19	1.7 1.8 2.0 2.0 2.1	e1.1 e1.3 e1.7 e1.4 e1.3	e3.0 e3.1 e3.2 e3.4 e3.5 e3.8	e27 e15 e17 	6.5 6.4 6.6 6.5 6.5	5.9 9.5 8.3 6.9 6.4	5.4 5.3 5.3 6.3 18 267	4.2 3.7 3.4 3.2 2.9	69 14 140 60 14 8.2	1.1 .98 .78 .64 .56	1.9 1.9 1.8 1.8
MEAN MAX MIN AC-FT	1.24 19 .00 76	1.61 7.1 .86 96	1.69 2.5 1.1 104	3.06 4.5 1.3 188	6.33 27 2.2 352	17.9 114 6.4 1100	6.87 13 5.6 409	17.7 267 5.3 1090	14.1 113 2.9 838	13.3 140 .16 821	1.83 8.3 .46 113	2.18 10 .44 130

06847900 PRAIRIE DOG CREEK ABOVE KEITH SEBELIUS LAKE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	4.59 106 1966 .000 1965	2.35 14.8 1966 .000 1965	2.54 12.2 1997 .000 1981	2.75 10.4 1997 .000 1981	5.25 19.8 1966 .000 1981	9.03 129 1993 .058 1982	6.15 31.8 1971 .076 1982	9.68 33.0 1977 .69 1992	26.9 280 1996 .48 1992	16.1 81.0 1965 .000 1991	11.2 83.0 1992 .000 1980	11.6 163 1965 .000 1964
SUMMARY	Y STATIST	ICS	FOR 2	2000 CALENI	DAR YEAR	F	OR 2001 WA	TER YEAR		WATER YEA	ARS 1963	- 2001
	MEAN F ANNUAL I			3.23			7.34			9.01 42.1 .27		1965 1981
	r Daily M			19	Oct 30		267	May 31		3150		24 1996
	DAILY ME			.00	Aug 10		.00			.00		26 1963
		Y MINIMUM		.00	Aug 10		.00			.00		26 1963
	M PEAK FL M PEAK ST.						353 8.58	Jul 28 Jul 28		8880 14.81	Sep	6 1972 6 1972
	M PEAK SI. TANEOUS L						.00			.00	_	y years
	RUNOFF (.			2340			5310	000 1		6530	morr	, ,carb
	CENT EXCE	- ,		7.2			13			11		
50 PERG	CENT EXCE	EDS		1.8			2.9			2.1		
90 PERG	CENT EXCE	EDS		.00			.48			.00		



06847900 PRAIRIE DOG CREEK ABOVE KEITH SEBELIUS LAKE, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-70, 2000 to current year.

 ${\tt REMARKS.--Sediment\ samples\ are\ collected\ only\ at\ selected\ flow\ conditions.}$

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAY 31	0950	303	189	15.5	1560	1280	99
JUN 01 13	0855 1450	114 9.6	243 943	15.5 22.0	1000 220	309 5.7	

06847950 KEITH SEBELIUS LAKE NEAR NORTON, KS

LOCATION.--Lat $39^{\circ}48^{\circ}27^{\circ}$, long $99^{\circ}56^{\circ}04^{\circ}$, in SW $^{1}/_{4}$ NE $^{1}/_{4}$ sec.8, T.3 S., R.23 W., Norton County, Hydrologic Unit 10250015, in control tower near left end of Norton Dam on Prairie Dog Creek, 3.0 mi southwest of Norton, and at mile 74.9.

DRAINAGE AREA. -- 683 mi².

PERIOD OF RECORD. --October 1964 to current year. Prior to Dec. 28, 1980, published as "Norton Reservoir near Norton."

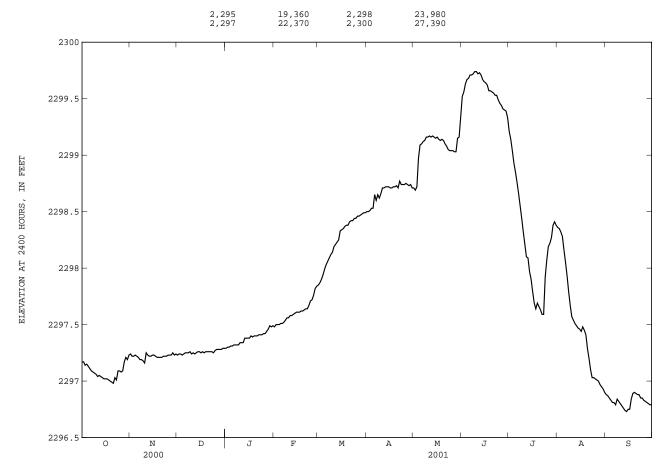
GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Bureau of Reclamation).

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Oct. 6, 1964. Total capacity, 193,023 acre-ft, consisting of the following: Sedimentation, 2,920 acre-ft below elevation 2,275.5 ft; conservation pool, 33,010 acre-ft, between elevations 2,275.5 ft and 2,304.3 ft; flood-control pool, 98,800 acre-ft, between elevations 2,304.3 ft and 2,331.4 ft; and surcharge pool, 58,280 acre-ft, between elevations 2,331.4 ft and 2,341.0 ft. Reservoir is used for flood control and irrigation in Almena Unit, Missouri River Basin project. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 2,306.58 ft Feb. 25, 1997, contents, 41,160 acre-ft; minimum elevation since conservation pool was first filled, 2,275.82 ft Nov. 27, 28, 1981, Jan. 24, 30, 31, 1982 contents, 3,050 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 2,299.76 ft June 13, contents, 26,980 acre-ft; minimum elevation 2,296.72 ft Sept. 5, contents, 21,940 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet) (Based on field survey of Bureau of Reclamation in 1955, revised in 1965)



06847950 KEITH SEBELIUS LAKE NEAR NORTON, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2297.17	2297.24	2297.23	2297.29	2297.48	2297.85	2298.50	2298.71	2299.52	2299.21	2298.36	2296.88
2	2297.17	2297.22	2297.24	2297.30	2297.50	2297.87	2298.50	2298.69	2299.56	2299.14	2298.35	2296.87
3	2297.14	2297.22	2297.24	2297.30	2297.50	2297.90	2298.51	2298.72	2299.63	2299.04	2298.32	2296.85
4	2297.15	2297.23	2297.23	2297.31	2297.50	2297.94	2298.53	2298.97	2299.67	2298.93	2298.28	2296.83
5	2297.13	2297.22	2297.24	2297.31	2297.51	2297.99	2298.53	2299.09	2299.68	2298.85	2298.16	2296.81
6	2297.11	2297.21	2297.25	2297.32	2297.51	2298.03	2298.65	2299.10	2299.71	2298.76	2298.05	2296.81
7	2297.09	2297.19	2297.25	2297.32	2297.52	2298.06	2298.60	2299.12	2299.71	2298.66	2297.93	2296.79
8	2297.08	2297.19	2297.25	2297.32	2297.54	2298.09	2298.65	2299.13	2299.72	2298.55	2297.79	2296.84
9	2297.07	2297.18	2297.26	2297.32	2297.56	2298.12	2298.62	2299.16	2299.74	2298.44	2297.67	2296.82
10	2297.06	2297.16	2297.24	2297.34	2297.56	2298.14	2298.66	2299.16	2299.74	2298.32	2297.57	2296.80
11	2297.04	2297.25	2297.25	2297.34	2297.58	2298.19	2298.71	2299.17	2299.72	2298.21	2297.54	2296.78
12	2297.05	2297.23	2297.24	2297.34	2297.58	2298.21	2298.71	2299.16	2299.73	2298.10	2297.51	2296.76
13	2297.04	2297.22	2297.25	2297.38	2297.59	2298.23	2298.72	2299.17	2299.71	2298.09	2297.49	2296.74
14	2297.03	2297.22	2297.26	2297.38	2297.60	2298.25	2298.72	2299.16	2299.67	2297.97	2297.47	2296.73
15	2297.02	2297.23	2297.26	2297.38	2297.61	2298.33	2298.72	2299.15	2299.65	2297.90	2297.46	2296.75
16	2297.02	2297.23	2297.25	2297.38	2297.61	2298.34	2298.71	2299.16	2299.64	2297.79	2297.44	2296.75
17	2297.02	2297.22	2297.26	2297.40	2297.61	2298.35	2298.71	2299.14	2299.62	2297.69	2297.48	2296.84
18	2297.01	2297.21	2297.25	2297.39	2297.62	2298.37	2298.72	2299.13	2299.57	2297.64	2297.45	2296.89
19	2297.00	2297.21	2297.26	2297.40	2297.62	2298.38	2298.72	2299.14	2299.57	2297.69	2297.41	2296.90
20	2296.99	2297.21	2297.26	2297.40	2297.63	2298.38	2298.73	2299.13	2299.56	2297.66	2297.29	2296.89
21	2296.98	2297.21	2297.26	2297.40	2297.64	2298.41	2298.71	2299.10	2299.55	2297.63	2297.20	2296.88
22	2297.03	2297.22	2297.26	2297.41	2297.64	2298.42	2298.77	2299.08	2299.53	2297.59	2297.10	2296.85
23	2297.01	2297.22	2297.26	2297.41	2297.67	2298.42	2298.74	2299.05	2299.53	2297.59	2297.03	2296.85
24	2297.09	2297.22	2297.25	2297.41	2297.71	2298.44	2298.74	2299.04	2299.49	2297.92	2297.03	2296.85
25	2297.09	2297.23	2297.27	2297.42	2297.72	2298.44	2298.74	2299.04	2299.46	2298.07	2297.02	2296.83
26 27 28 29 30 31	2297.08 2297.09 2297.17 2297.21 2297.19 2297.23	2297.23 2297.25 2297.25 2297.23 2297.24	2297.28 2297.28 2297.28 2297.28 2297.29 2297.29	2297.42 2297.44 2297.46 2297.49 2297.48 2297.49	2297.76 2297.82 2297.84 	2298.46 2298.46 2298.47 2298.48 2298.49 2298.49	2298.75 2298.74 2298.73 2298.74 2298.71	2299.04 2299.03 2299.15 2299.16 2299.34	2299.44 2299.41 2299.39 2299.33 	2298.19 2298.22 2298.27 2298.38 2298.41 2298.38	2297.01 2297.00 2296.97 2296.95 2296.93 2296.90	2296.82 2296.81 2296.80 2296.79 2296.79
MEAN	2297.08	2297.22	2297.26	2297.38	2297.61	2298.26	2298.68	2299.08	2299.59	2298.24	2297.49	2296.82
MAX	2297.23	2297.25	2297.29	2297.49	2297.84	2298.49	2298.77	2299.34	2299.74	2299.21	2298.36	2296.90
MIN	2296.98	2297.16	2297.23	2297.29	2297.48	2297.85	2298.50	2298.69	2299.33	2297.59	2296.90	2296.73
(+)	22,740	22,760	22,840	23,160	23,720	24,800	25,170	26,240	26,230	24,610	22,220	22,050
(#)	+60	+20	+80	+320	+560	+1,080	+370	-1,070	-10	-1,620	-2,390	-170

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

06848000 PRAIRIE DOG CREEK AT NORTON, KS

LOCATION.--Lat $39^{\circ}48^{\circ}36^{\circ}$, long $99^{\circ}55^{\circ}18^{\circ}$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.9, T.3 S., R.23 W., Norton County, Hydrologic Unit 10250015, on left bank 0.9 mi downstream from Norton Dam, 2.0 mi southwest of Norton, and at mile 74.0.

DRAINAGE AREA.--684 mi².

DERIOD OF RECORD. --October 1943 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS. -- WSP 1310: 1944(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,237.38 ft above sea level (levels by Bureau of Reclamation). Apr. 13 to May 7, 1944, nonrecording gage and May 8, 1944, to Sept. 30, 1961, water-stage recorder at site 3.2 mi downstream at datum 19.47 ft lower. Oct. 1, 1961, to Apr. 19, 1965, water-stage recorder at site 0.5 mi upstream at datum 3.82 ft lower. Apr. 20, 1965, to Sept. 30, 1974, water-stage recorder at same site at datum 2.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow completely regulated since 1964 by Keith Sebelius Lake (station 06847950), 0.9 mi upstream. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.43 .53 .53 .63	.44 .40 .39 .41	e.53 e.53 e.53 e.53 e.53	.39 .43 e.45 .63	.39 .40 .43 .43	.64 .66 .69 .63	.38 .41 .38 .40	.27 .28 .39 1.5	3.6 .57 .75 .69	60 60 64 75 62	.49 .49 .46 .97	.35 .35 .33 .33
6 7 8 9 10	.63 .59 .62 .62	.47 .43 .43 .45	.53 .55 .51 .50	.58 .52 .47 .46 .51	.60 .50 .51 .68 e.60	.62 .64 .61 .66	. 44 . 59 . 36 . 37 . 33	.46 .34 .95 .84 .55	.43 .37 .29 .36	44 51 71 84 83	74 77 86 79 62	.35 .42 .67 .53
11 12 13 14 15	.60 .59 1.4 .51 .47	.59 .63 .59 .57	.46 e.40 .37 .29	. 46 . 42 . 51 . 43 . 39	.63 .60 .57 .54 e.50	.63 .70 .70 .67	.88 .56 .39 .33	.38 .33 .34 .32	.18 .26 .30 .20	83 73 63 74 83	23 .71 .61 .52 .54	.32 .33 .35 .34
16 17 18 19 20	.48 .47 .46 .40	.55 1.4 .63 .69	.34 .39 .36 .35	.38 .38 .38 .38	.49 e.50 .54 .52 .47	.62 .50 .50 .52 .46	.33 .35 .40 .41	.35 .34 .25 .27	.19 .19 .17 .21	82 82 81 76 29	.48 .51 .53 14 74	.57 .68 .83 .55
21 22 23 24 25	.28 .51 .40 .71	.52 .47 .46 .45	.40 e.35 .35 .41 e.40	.35 .35 .38 .39	.47 .52 .54 .70	.44 .42 .45 .47	. 26 . 38 . 30 . 27 . 28	.30 .31 .27 .31	.31 .17 .18 .19	.76 .48 .41 .96	75 76 64 2.2 .70	.37 .39 .35 .38
26 27 28 29 30 31	.40 .40 .64 .64 .41	.51 .50 .51 e.48 e.53	.41 .39 .44 .43 .41	.42 .40 .40 .41 .44	.61 e.60 .74 	.39 .42 .43 .43 .41	.22 .22 .20 .21 .33	.33 .30 .28 .74 .83	.12 .18 .19 1.9 26	.52 .64 .47 .40 1.1	.55 .48 .44 .38 .38	.52 .39 .41 .39 .41
MEAN MAX MIN AC-FT	.54 1.4 .28 33	.56 1.4 .39 33	.43 .55 .29 26	. 43 . 63 . 35 27	.54 .74 .39 30	.55 .77 .39 34	.37 .88 .20 22	.50 1.5 .25 31	1.32 26 .12 78	44.8 84 .40 2750	25.3 86 .35 1560	.45 .99 .31 27

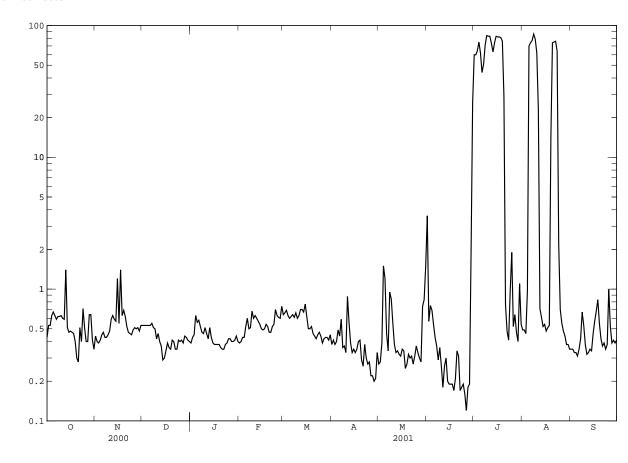
06848000 PRAIRIE DOG CREEK AT NORTON, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	10.3 466 1947 .000 1979	2.50 36.3 1947 .000 1957	2.18 18.2 1947 .000 1965	2.27 20.3 1947 .000 1965	5.86 78.1 1949 .000 1965	9.51 265 1960 .000 1965	6.37 89.3 1944 .000 1965	24.6 438 1953 .000 1965	47.3 656 1957 .000 1981	65.1 648 1951 .000 1981	24.8 390 1950 .000 1982	10.9 385 1951 .000 1978
SUMMARY	STATIST	ICS	FOR 2	000 CALENI	DAR YEAR	FC	OR 2001 WA	TER YEAR		WATER YEA	ARS 1944	- 2001
	MEAN ANNUAL M ANNUAL ME			5.50			6.43			16.9 145 .019	9	1951 1983
	DAILY ME			75 .20	Jun 21 Mar 16		86 .12	Aug 8 Jun 26		9650		28 1953 4 1954
	SEVEN-DAY	MINIMUM W		.22	Mar 11		.17 96	Jun 22 Jul 19		.00 37500	Sep	21 1954 28 1953
INSTANT	I PEAK STA CANEOUS LO	OW FLOW					5.54 .00	Jul 19 Jun 10		25.60 .00		28 1953 t years
10 PERC	RUNOFF (<i>I</i> CENT EXCE	EDS		3990 22			4650 1.9			12210 26		
	CENT EXCER CENT EXCER			.42			.47 .30			.44		

e Estimated

MEAN DAILY DISCHARGE, IN FT3/S



06848500 PRAIRIE DOG CREEK NEAR WOODRUFF, KS

LOCATION.--Lat $39^{\circ}59^{\circ}09^{\circ}$, long $99^{\circ}28^{\circ}39^{\circ}$, in NW $^{1}/_{4}$ sec.9, T.1 S., R.19 W., Phillips County, Hydrologic Unit 10250015, on left bank at downstream side of bridge on U.S. Highway 383, 1.0 mi south of Kansas-Nebraska State line, 2.5 mi west of Woodruff, and at mile 26.5.

DRAINAGE AREA. -- 1,007 mi².

PERIOD OF RECORD.--October 1928 to September 1932, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,016.20 ft above sea level. See WSP 1919 for history of changes prior to Oct. 7,

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated to some extent since 1964 by Keith Sebelius Lake (station 06847950), 48.4 mi upstream, and by irrigation development upstream from station. Satellite telemeter at station.

		DISCHARGE	E, CUBIC	FEET PER		WATER YI Y MEAN V	EAR OCTOBER ALUES	2000 TO	SEPTEMBER	2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.94 .86 3.6 2.7	4.7 5.2 6.1 5.3 4.8	5.5 5.5 5.6 5.5 5.6	e6.2 e5.5 e5.8 e6.2 e6.5	e5.8 e5.8 e6.2 e7.2 e8.6	e42 e35 e29 e24 e30	e8.7 e8.6 e8.5 e8.5	11 11 11 36 87	20 12 16 15 12	3.5 3.4 4.1 3.4 569	5.2 4.6 4.3 4.3	3.9 3.2 3.5 3.6 3.3
6 7 8 9 10	.82 .84 .91 .91	5.2 4.8 4.6 4.7 4.6	5.6 5.6 5.7 e5.4 e5.0	e6.6 e6.8 e7.0 e6.7 e6.6	e9.3 e10 e12 e9.6 e9.4	e45 116 185 162 88	33 45 22 14 13	50 51 39 24 16	9.7 9.0 8.7 9.2	52 17 9.7 5.8 6.3	4.2 4.2 4.0 4.7 6.9	3.2 3.3 3.2 3.2 3.1
11 12 13 14 15	.82 1.2 1.3 .94	5.6 e5.3 e5.2	e5.0 e5.1 e5.4 e5.5 e5.6	e7.0 e6.4 e6.2 e6.0 e5.8	e9.2 e9.1 e9.1 e9.2 e9.2	44 37 e30 e26 23	26 19 15 14 13	13 13 12 11	9.6 7.3 6.7	7.5 7.7 9.6 4.6 6.2	5.7 5.4 5.2 4.2 3.5	3.2 3.0 2.7 2.7 5.3
16 17 18 19 20	2.0 1.3 1.2 .87 3.3	e5.2 e5.2 e5.3 e5.3	e5.8 6.1 6.8 7.3 7.0	e5.6 e5.5 e5.4 e5.4	e9.2 e8.6 e8.0 e9.6 e11	23 17 12 11	12 12 11 11 12	10 10 9.8 9.6 9.6	6.0 5.9 5.8 5.3 5.6	8.3 6.4 5.9 7.5	3.0 2.9 3.0 2.7 2.3	10 5.3 11 7.3 7.6
21 22 23 24 25	2.4 1.8 1.8 2.1 3.3	5.5	7.1 6.5 e6.0 e5.8 e5.4	e5.7 e6.0 e6.2 e6.3 e6.4	e12 e12 e13 e17 e28	10 10 10 9.8	12 12 13 12	10 11 9.9 8.9 8.6	5.6 5.6 5.7 5.6 4.6	10 6.4 7.3 4.1 119	2.6 4.0 15 45 24	3.8 2.8 2.5 2.3 2.2
26 27 28 29 30 31	5.2 8.9 6.2 5.6 6.1 5.2	5.6 5.6 5.5	e5.3 e5.2 e5.2 e5.8 e6.8 e7.0	e6.4 e6.2 e6.0 e6.0 e5.9 e5.8	e50 e48 e46 	11 12 11 11 e9.4 e8.9	11 11 11 11 11	8.7 8.6 8.8 9.5 28	4.6 4.3 4.2 4.0 3.9	51 135 43 18 8.6 6.5	13 9.7 8.3 6.7 5.7	2.3 2.3 2.3 2.3 2.3
MEAN MAX MIN AC-FT	2.45 8.9 .82 150	5.30 6.1 4.6 315	5.83 7.3 5.0 358	6.11 7.0 5.4 376	14.4 50 5.8 798	35.6 185 8.9 2190	14.3 45 8.5 854	18.8 87 8.6 1160	8.04 20 3.9 478	37.3 569 3.4 2300	7.21 45 2.3 443	3.89 11 2.2 231

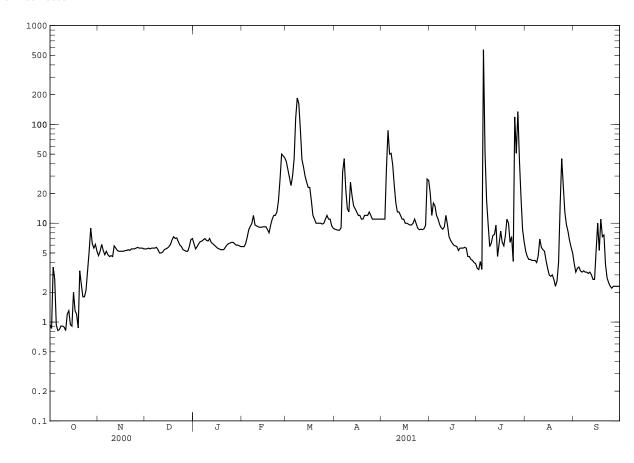
06848500 PRAIRIE DOG CREEK NEAR WOODRUFF, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	19.3 429 1947 .000 1955	6.56 56.5 1931 .000 1956	5.43 26.0 1947 .000 1956	5.44 22.5 1931 .000 1956	16.1 230 1932 .000 1957	17.8 240 1960 .000 1957	10.3 36.6 1952 .000 1985	43.1 422 1949 .000 1992	86.8 1041 1947 .000 1984	62.3 1070 1951 .000 1984	34.7 430 1950 .000 1959	23.1 402 1951 .000 1960
SUMMARY	Y STATIST	ICS	FOR 2	000 CALENI	DAR YEAR	F	OR 2001 WA	TER YEAR		WATER YEA	RS 1929	- 2001
LOWEST	ANNUAL M	EAN		10.2	- 1 00		13.3	-1		26.9 208 .051	_	1951 1991
	DAILY ME			426 .27	Jul 23 Sep 26		569 .82	Jul 5 Oct 6		9700 .00		23 1947 29 1945
		Y MINIMUM		.36			.87			.00	Oct	5 1948
	M PEAK FLO M PEAK ST						1810 17.61	Jul 5 Jul 5		15000 21.04		23 1947 23 1947
	TANEOUS L						.72			.00		t years
ANNUAL	RUNOFF (AC-FT)		7410			9650			19480		•
10 PERC	CENT EXCE	EDS		15			24			28		
50 PERC	CENT EXCE	EDS		6.0			6.3			4.4		
90 PERC	CENT EXCE	EDS		.88			2.9			.00		

e Estimated

MEAN DAILY DISCHARGE, IN FT3/S



06853500 REPUBLICAN RIVER NEAR HARDY, NE

LOCATION.--Lat 39°59'33", long 97°55'53", in NE $^{1}/_{4}$ NE $^{1}/_{4}$ Sec.1, T.1 S., R.6 W., in Kansas, Republic County, Hydrologic Unit 10250016, on right bank at upstream side of county highway bridge, 1.2 mi southwest of Hardy, NE, and at mile 141.2.

DRAINAGE AREA.--22,401 mi², of which about 7,500 mi² does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1904 to September 1915 (no winter records), April 1931 to current year. Prior to May 1932, published as "at Bostwick." Records for June 1896 to November 1903 published as "near Superior" in 18th to 22nd Ann. Repts., inclusive, Pt. 4, and WSP 75, 84, and 99, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 806: Drainage area. WSP 1006: 1941. WSP 1340: 1905(M), 1907-09, 1912, 1914-15, 1931. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 1,501.46 ft above sea level. Prior to May 19, 1932, nonrecording gage at site at Bostwick, 20 mi upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by irrigation development upstream from station and by storage in reservoirs in Colorado, Kansas, and Nebraska. Considerable regulation since 1952 by Harlan County Lake (station 06849000). Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stages since at least 1895, that of June 2, 1935, and 17.00 ft June 24, 1947, discharge, 100,000 ft³/s, based on records for upstream stations.

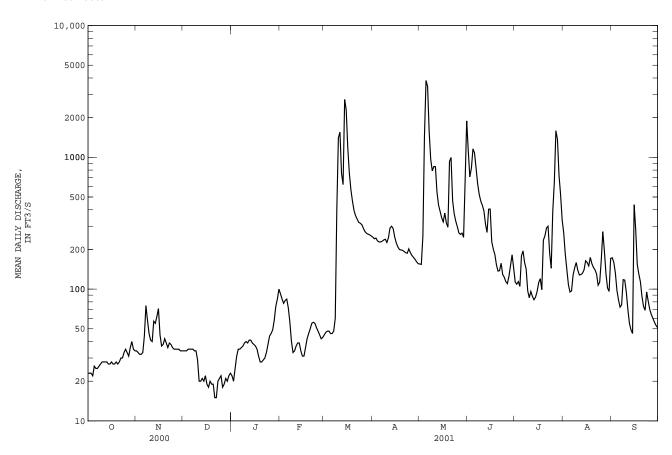
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV DEC FEB MAY SEP JAN APR JUL AUG e92 e22 e45 e20 e84 e47 e25 e78 e48 e31 e82 e48 e35 e84 e46 e35 e72 e46 236 523 e36 e56 e48 e37 e40 e60 e39 e33 e40 e34 e20 e39 e37 e20 e41 e39 300 e39 e21 e41 e2750 e20 e39 e34 e22 e38 e31 e18 27 e35 e36 e20 e42 e567 e31 e19 e28 e464 e19 e28 e50 e55 e15 e29 e15 e30 e56 e20 e55 e33 e21 e38 e51 e22 e44 e48 e18 e46 e45 e19 e49 e42 e21 e43 e20 e74 e22 e84 e23 e100 MEAN 28.6 42.4 24.3 40.7 51.2 MAX MTN

AC-FT

06853500 REPUBLICAN RIVER NEAR HARDY, NE--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	278 1970 1966 17.2 1992	229 1308 1994 22.3 1992	199 928 1994 24.3 2001	190 636 1966 33.7 1992	299 968 1966 27.0 1992	420 1584 1993 66.5 1991	445 2415 1960 39.1 1991	492 2523 1960 29.6 1992	495 2031 1960 46.5 1992	520 3210 1993 54.3 1991	316 1800 1962 58.7 1991	318 1455 1973 15.3 1991
SUMMARY	Y STATIST	ICS	FOR 2	2000 CALEI	NDAR YEAR	FC	OR 2001 W	ATER YEAR		WATER YEA	RS 1958	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUN	T ANNUAL M ANNUAL M T DAILY ME DAILY ME SEVEN-DA M PEAK FLO	EAN EAN AN Y MINIMUM OW		130 3890 15 18	Jul 5 Dec 21 Dec 16		225 3830 15 18 4190	May 5 Dec 21 Dec 16 May 5		350 800 72.5 15000 4.8 9.0 225000	Jun	1960 1991 1 1983 3 1991 26 1992 2 1935 2 1935
INSTANT ANNUAL 10 PERC 50 PERC	M PEAK STANEOUS LA RUNOFF (A CENT EXCENTEXCE CENT EXCENTEXCE CENT EXCENTEXCE	OW FLOW AC-FT) EDS EDS		94700 200 72 25			9.1 16 162600 467 96 27	2 May 5 Dec 10		19.40 .00 253800 781 170 63	Jun Aug	9 1934



06853800 WHITE ROCK CREEK NEAR BURR OAK, KS

LOCATION.--Lat 39°53'55", long 98°15'05", in SE $^{1}/_{4}$ NE $^{1}/_{4}$ NE $^{1}/_{4}$ sec.7, T.2 S., R.8 W., Jewell County, Hydrologic Unit 10250016, on left bank at upstream side of county highway bridge, 3.5 mi northeast of Burr Oak, and at mile 35.4.

DRAINAGE AREA. -- 227 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955-57, October 1957 to current year. GAGE.--Water-stage recorder. Datum of gage is 1,601.5 ft above sea level (levels by Bureau of Reclamation).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum known stage since at least 1869, 32.6 ft July 9, 1950, from floodmark 300 ft downstream and information by local resident.

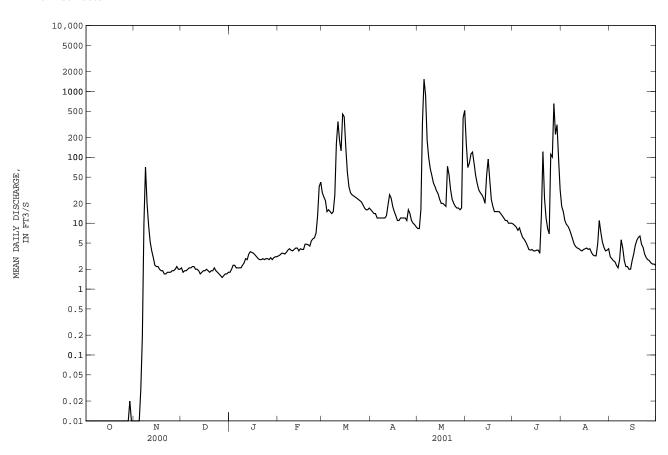
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Ti	me	Discharge (ft ³ /s)	Gag	e height (ft)		Date	Time	:	Discharge (ft ³ /s)		height (ft)
May 6	02	00	*1,790	*	15.12		Jul 27	0900)	1,250	1	3.66
		DISCHA	ARGE, CUBIC	FEET PE		WATER YE Y MEAN VA		ER 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	.00 .00 .00 .00	2.1 1.8 1.9 1.9 2.0	1.8 2.0 2.3 2.3 2.1	e3.2 e3.3 3.5 3.5 3.4	29 25 22 15 16	16 15 14 14 12	8.3 8.3 16 338 1530	163 70 82 112 120	9.7 9.2 8.7 7.8 8.5	18 15 11 9.6 9.0	3.1 2.9 2.7 2.6 2.3
6 7 8 9 10	.00 .00 .00 .00	.19 9.9 71 20 9.2	2.1 2.1 2.2 2.2 2.0	2.1 2.1 2.1 2.3 2.5	3.6 3.9 4.1 e3.9 3.8	15 14 15 27 162	12 12 12 12 12	869 180 99 67 53	81 53 40 32 29	7.1 6.1 5.7 5.2 4.6	8.0 6.8 5.7 4.8 4.4	2.1 2.8 5.6 4.2 2.7
11 12 13 14 15	.00 .00 .00 .00	5.2 3.8 3.0 2.3 2.2	2.0 1.9 1.7 1.8 1.9	2.9 2.8 3.4 3.7 3.6	e4.0 e4.2 e4.2 e3.8 e4.1	350 182 125 453 412	13 19 27 24 18	41 36 31 28 23	27 24 20 53 94	4.0 3.9 4.0 3.8 3.8	4.2 4.1 3.9 3.8 4.0	2.2 2.2 2.0 2.0 2.7
16 17 18 19 20	.00 .00 .00 .00	2.2 2.0 1.9 1.9	1.9 2.0 1.9 1.8 1.9	3.5 3.3 e3.1 e2.9 e2.8	e4.0 e4.0 e4.8 e4.8 e4.7	143 60 36 29 27	15 13 11 11 12	20 20 19 18 73	46 23 18 15 15	3.9 3.9 3.5 13 122	4.1 4.2 4.0 4.1 3.6	3.4 4.6 5.5 6.1 6.4
21 22 23 24 25	.00 .00 .00 .01	1.7 1.8 1.8 1.8	1.9 2.1 1.9 1.8 1.7	2.8 2.9 2.8 2.9 2.9	e4.5 e5.4 5.8 e6.0 7.1	26 25 24 23 22	12 12 12 11 16	54 32 23 20 18	15 15 14 13 12	24 12 8.3 6.9	3.3 3.2 3.2 4.9	4.8 4.3 3.4 3.0 2.8
26 27 28 29 30 31	.00 .00 .00 .02 .00	1.9 2.0 2.2 2.0 2.0	1.6 1.5 1.6 1.7 1.7	2.8 3.0 2.8 3.0 3.1 3.1	13 36 42 	21 19 17 16 16 17	14 11 10 9.5 8.8	17 17 16 17 398 515	11 11 10 10 10	101 655 223 312 95 32	7.3 5.2 4.3 3.8 3.9 4.1	2.7 2.5 2.4 2.4 2.3
MEAN MAX MIN MED AC-FT	.001 .02 .00 .00	5.19 71 .00 2.0 309	1.88 2.2 1.5 1.9 116	2.76 3.7 1.8 2.8 170	7.09 42 3.2 4.1 394	76.9 453 14 25 4730	13.7 27 8.8 12 814	149 1530 8.3 28 9130	41.3 163 10 24 2460	58.7 655 3.5 8.3 3610	6.02 18 3.2 4.2 370	3.29 6.4 2.0 2.8 196

06853800 WHITE ROCK CREEK NEAR BURR OAK, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	7	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	17.8 319 1974 .000 1967	11.6 120 1997 .084 1969	8.24 43.5 1994 .21 1969	12.5 125 1962 .32 1969	22.8 143 1993 .94 1972	39.1 318 1993 .75 1968	31.2 236 1987 .89 1967	44.6 174 1985 .91 1968	<u> </u>	51.0 257 1961 2.11 2000	51.2 658 1993 .20 1991	21.1 166 1993 .007 1959	33.0 519 1973 .000 1991
SUMMARY	Y STATIST	ICS	FOR 2	2000 CALENI	DAR YEAR	F	OR 2001 WA	TER YE	AR		WATER YEA	ARS 1958	- 2001
	MEAN F ANNUAL I ANNUAL M			6.33			30.8				28.7 136 4.93		1993 1968
HIGHEST	r daily m	EAN		71	Nov 8		1530	May	5		6000	Sep	3 1973
	DAILY ME			.00	Aug 17		.00	Oct	1		.00	Oct	4 1957
		Y MINIMUM		.00	Aug 20		.00	Oct	1		.00		16 1957
	M PEAK FL						1790	May	6		15800	Sep	3 1973
	M PEAK ST						15.12	May	6		25.06	Sep	3 1973
	FANEOUS L						.00	Oct	1		.00	man	y years
ANNUAL	RUNOFF (AC-FT)		4600			22290				20780		
10 PERG	CENT EXCE	EDS		15			49				40		
50 PERG	CENT EXCE	EDS		2.1			4.3				6.0		
90 PER	CENT EXCE	EDS		.00			.13				.47		



06853900 LOVEWELL RESERVOIR NEAR LOVEWELL, KS

LOCATION.--Lat 39°53'04", long 98°01'41", in NW $^{1}/_{4}$ NE $^{1}/_{4}$ sec.18, T.2 S., R.6 W., Jewell County, Hydrologic Unit 10250016, at south end of Lovewell Dam on White Rock Creek, 3 mi northwest of Lovewell, and at mile 19.3.

DRAINAGE AREA. -- 345 mi².

PERIOD OF RECORD.--May 1957 to current year. Monthly records only, May to September 1957.

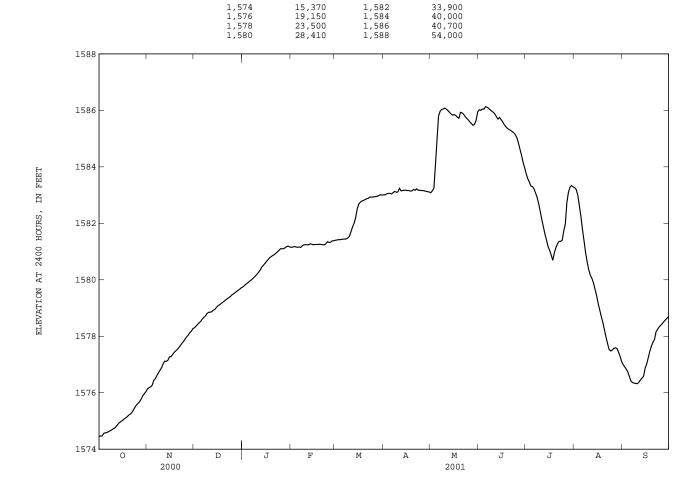
GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Bureau of Reclamation). From June 15, 1960, to May 6, 1975, water-stage recorder at north end of dam at same datum.

REMARKS.--Reservoir is formed by earthfill dam. Closure was made May 29, 1957. Irrigation pool elevation was first reached on May 19, 1958. Total capacity of 180,300 acre-ft consists of the following: Dead storage, 1,660 acre-ft below elevation 1,562.07 ft; irrigation pool, 34,010 acre-ft between elevations 1,562.07 ft and 1,582.6 ft; flood-control pool, 50,460 acre-ft between elevations 1,582.6 ft and 1,595.3 ft; and surcharge pool, 94,170 acre-ft between elevations 1,595.3 ft and 1,610.3 ft. Storage in reservoir is derived from White Rock Creek and diversion from the Republican River through upper Courtland Canal. Releases are made into White Rock Creek and for irrigation of 30,000 acres through lower Courtland Canal. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,595.38 ft July 22, 1993, contents, 92,560 acre-ft; minimum elevation since irrigation pool was first reached, 1,570.21 ft Aug. 21, 1991, contents 14,330 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,586.15 ft May 10, contents, 47,220 acre-ft; minimum elevation, 1,574.40 ft Oct. 1, contents, 16,080 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet) (Computed by Bureau of Reclamation on basis of resurvey made in 1995) (used Oct. 1, 1995, to present)



06853900 LOVEWELL RESERVOIR NEAR LOVEWELL, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5		1576.21 1576.27	1578.30 1578.36 1578.42 1578.48 1578.53	1579.75 1579.80 1579.85 1579.89 1579.94		1581.40 1581.41 1581.42 1581.42 1581.43	1583.01 1583.01 1583.05 1583.06 1583.06	1583.08 1583.15 1583.24 1584.07 1584.96	1586.02 1586.00 1586.05 1586.04 1586.13	1583.75 1583.58 1583.46 1583.32 1583.30	1583.26 1583.19 1582.99 1582.61 1582.23	1576.99 1576.91 1576.83 1576.73
6 7 8 9 10	1574.65 1574.68	1576.50 1576.61 1576.71 1576.80 1576.89	1578.61 1578.67 1578.72 1578.80 1578.85	1579.98 1580.03 1580.08 1580.14 1580.20	1581.21 1581.24	1581.45		1585.81 1585.97 1586.03 1586.05 1586.08	1586.11 1586.07 1586.02 1585.97 1585.93	1583.22 1583.07 1582.91 1582.69 1582.41	1581.77 1581.36 1580.94 1580.62 1580.35	1576.41 1576.36 1576.34 1576.33 1576.32
11 12 13 14 15	1574.88 1574.94	1577.03 1577.12 1577.11 1577.15 1577.27	1578.95	1580.27 1580.35 1580.45 1580.51 1580.58	1581.27	1581.70 1581.87 1582.00 1582.20 1582.51	1583.24 1583.15 1583.16 1583.17 1583.17	1586.04 1585.99 1585.93 1585.87 1585.83	1585.87 1585.77 1585.69 1585.75 1585.67	1582.12 1581.87 1581.61 1581.40 1581.17	1580.16 1580.05 1579.88 1579.66 1579.44	1576.37 1576.45 1576.52 1576.58 1576.87
16 17 18 19 20	1575.11 1575.15	1577.28 1577.35 1577.43 1577.48 1577.53		1580.78	1581.25 1581.25 1581.25 1581.26 1581.25	1582.68 1582.75 1582.79 1582.81 1582.84	1583.14 1583.15	1585.85 1585.82 1585.76 1585.72 1585.93	1585.59 1585.49 1585.42 1585.36 1585.32	1581.04 1580.87 1580.69 1580.96 1581.14	1579.16 1578.93 1578.69 1578.49 1578.23	1577.02 1577.24 1577.47 1577.65 1577.79
21 22 23 24 25		1577.60 1577.67 1577.75 1577.82 1577.90	1579.29 1579.33 1579.37 1579.41 1579.47	1580.89 1580.94 1580.99 1581.04 1581.10	1581.24 1581.24 1581.28 1581.35 1581.32	1582.93	1583.17 1583.22 1583.17 1583.17 1583.16	1585.91 1585.86 1585.78 1585.72 1585.66	1585.29 1585.25 1585.21 1585.14 1585.04	1581.28 1581.36 1581.36 1581.40 1581.73	1577.97 1577.74 1577.53 1577.48 1577.51	1577.89 1578.16 1578.25 1578.33 1578.39
26 27 28 29 30 31	1575.90	1577.98 1578.04 1578.13 1578.18 1578.27	1579.67	1581.10 1581.10 1581.14 1581.18 1581.19 1581.16	1581.38	1582.94 1582.95 1582.96 1582.99 1583.01 1583.00		1585.59 1585.53 1585.47 1585.51 1585.65 1585.95		1581.97 1582.74 1583.10 1583.28 1583.34 1583.29	1577.57 1577.59 1577.57 1577.44 1577.29 1577.10	1578.45 1578.52 1578.58 1578.64 1578.70
MEAN MAX MIN (+) (#)		1577.23 1578.27 1576.14 24,130 +4,890	1579.05 1579.72 1578.30 27,690 +3,560	1580.56 1581.19 1579.75 31,520 +3,830	1581.24 1581.38 1581.15 32,130 +610	1582.29 1583.01 1581.40 36,870 +4,740	1583.13 1583.24 1583.01 37,210 +340	1585.48 1586.08 1583.08 46,520 +9,310	1585.47 1586.13 1583.97 39,900 -6,620	1582.24 1583.75 1580.69 37,760 -2,140	1579.51 1583.26 1577.10 21,470 -16,290	1577.32 1578.70 1576.32 25,160 +3,690

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

06854000 WHITE ROCK CREEK AT LOVEWELL, KS

LOCATION.--Lat 39°53'10", long 98°01'20", in NW $^{1}/_{4}$ NW $^{1}/_{4}$ NE $^{1}/_{4}$ sec.17, T.2 S., R.6 W., Jewell County, Hydrologic Unit 10250016, on right bank 1,400 ft east of Lovewell Dam, 2.5 mi northwest of Lovewell, and at mile 18.8.

DRAINAGE AREA. -- 345 mi².

AC-FT

4.9

3.2

. 6

PERIOD OF RECORD. --October 1945 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS. -- WSP 1340: 1946-47, 1949-50(P).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,531.52 ft above sea level (Bureau of Reclamation bench mark). May 21, 1946, to Sept. 13, 1947, nonrecording gage, and Sept. 14, 1947, to Apr. 23, 1951, water-stage recorder, at site 3.0 mi downstream at datum 1,513.95 ft above sea level (levels by U.S. Army Corps of Engineers). Apr. 24, 1951, to N 8, 1952, nonrecording gage, and Nov. 9, 1952, to June 14, 1960, water-stage recorder, at site 2.0 mi downstream at datum 1,519.53 ft above sea level. 24, 1951, to Nov.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow completely regulated since 1957 by Lovewell Reservoir (station 66853900), 0.5 mi upstream. Large flows from the Republican River enter Lovewell Reservoir from upper Courtland Canal. Figures of flow do not include diversion immediately upstream from station into lower Courtland Canal. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since 1870, that of July 10, 1950, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY DEC MAY AUG SEP OCT NOV JAN FEB APR JUL .07 . 22 108 .00 .06 e.10 e.30 .28 .17 .89 .67 .10 .04 .18 2 .00 .08 .12 e.29 .29 .15 108 .81 .69 .08 3 .00 .03 .08 .12 .29 .30 .22 .31 107 .83 .68 .08 .29 .30 . 23 .09 .00 .03 .08 .13 118 .82 .71 5 .00 .08 .15 .29 .29 .13 1.2 118 .85 .71 .04 .06 6 7 .00 .11 .08 .18 .28 .30 .07 .69 115 .81 .73 .07 .09 .16 51 .00 .07 .09 .18 .28 .31 .06 114 .81 .70 .08 8 .00 .07 .09 .17 .29 .32 .04 110 .82 .66 .16 .00 .09 .09 .24 e.28 .34 .06 114 110 .93 .61 10 .00 .07 e.09 .35 e.28 .35 .09 117 109 .95 .67 .46 11 .00 .06 e.08 .36 .28 .36 .11 119 108 1.1 .68 .46 12 .00 .07 .08 .33 .28 .35 .08 119 109 1.1 .60 .12 13 120 105 .08 .59 e.27 .04 .08 .33 .35 .08 120 .09 15 .00 .04 .07 .32 e.27 .37 .07 120 122 1.3 .59 .21 .04 .08 .32 e.27 .35 .18 16 113 .63 .36 1.3 .23 17 0.0 .03 .07 e.32 .27 .18 106 123 .69 18 .00 .03 .09 e.32 .28 .08 106 71 .64 .07 .28 .32 .03 106 1.5 .63 20 .00 0.4 .07 e.33 .28 .30 .02 100 1.1 .69 .21 21 .00 .04 .07 .34 e.27 .30 .02 97 1.0 .61 .77 .35 .27 .29 .32 1.0 .20 22 0.0 0.4 .07 .03 105 62 84 23 .00 .04 .07 .03 109 .64 .80 .15 24 .01 .05 e.07 .35 .37 .52 .04 107 .72 1.0 .35 25 0.4 06 e.08 31 55 .05 108 1 0 91 21 12 .74 26 .04 .06 e.08 .34 . 29 .58 .05 107 1.0 .17 .14 27 e.04 .07 .09 .33 e.28 .51 1.3 107 1.0 .86 .20 .16 28 e.04 .07 .09 e.31 e.28 .27 .33 107 .93 .23 .20 .69 .07 e.06 29 .09 e.30 .12 .21 107 .89 .70 . 20 .24 .17 30 e.04 .07 .09 e.30.19 108 .96 .66 .26 .23 .05 .22 107 MEAN .080 .010 .054 . 28 .28 .34 .15 83.4 66.7 .91 .57 .18 .06 .11 .36 .37 .58 1.3 120 123 1.5 .84 .46 MAX .09 .10 .12 .02 8.7 .17 MTN .00 .03 .07 27 .16 89 .61 .06

16

5130

3970

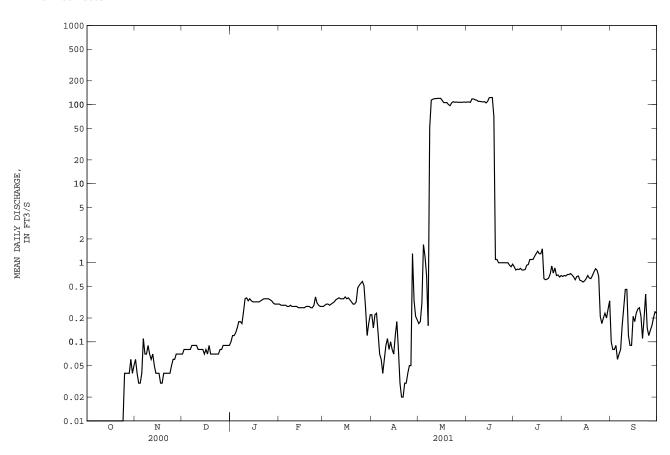
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06854000 WHITE ROCK CREEK AT LOVEWELL, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	43.1 972 1974 .000 1949	18.7 486 1974 .000 1956	8.76 110 1974 .000 1956	8.50 117 1987 .000 1956	24.9 282 1949 .000 1957	30.3 379 1993 .031 1985	51.2 848 1987 .054 1983	48.6 370 1987 .056 1988	94.9 856 1951 .14 1988	61.4 925 1950 .11 1991	31.6 724 1993 .037 2000	49.9 377 1973 .041 2000
SUMMARY	STATIST:	ICS	FOR 2	2000 CALENI	DAR YEAR	F	OR 2001 WA	TER YEA	R	WATER YE	ARS 1946	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUN MAXIMUN	CANNUAL I ANNUAL MI CDAILY MI DAILY MEA	EAN EAN AN Y MINIMUM OW AGE		.11 2.3 .00			12.8 123 .00 .00 163 3.07 .00	Oct May May	6 1 1 8 8	39.1 208 .11 16700 .00 .23300 21.62	Aug : Aug : Jul : Jul :	1993 2000 10 1950 21 1948 21 1948 10 1950
	RUNOFF (81			9270	OCL	1	28350	IIIOS	t years
10 PERC	CENT EXCE	EDS		.21			105			60		
	CENT EXCE			.08			.28			.26		
90 PERC	CENT EXCE	EDS		.01			.04			.05		



06856000 REPUBLICAN RIVER AT CONCORDIA, KS

LOCATION.--Lat $39^{\circ}35^{\circ}18^{\circ}$, long $97^{\circ}39^{\circ}30^{\circ}$, in SW $^{1}/_{4}$ NE $^{1}/_{4}$ sec.28, T.5 S., R.3 W., Cloud County, Hydrologic Unit 10250017, on right bank at upstream side of bridge on U.S. Highway 81, 1.0 mi north of Concordia, 4.9 mi downstream from Buffalo Creek, and at mile 98.5.

DRAINAGE AREA. -- 23,560 mi², of which about 7,500 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for some periods, published in WSP 1310. Gage-height records collected at nearby sites since 1951 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS. -- WSP 1340: 1946-47.

MEAN

MAX

MTN

AC-FT

30.0

57.8

e20

e20

e21

26.7

e94

e102

e100

50.5

59.9

GAGE.--Water-stage recorder. Datum of gage is 1,328.62 ft above sea level. Apr. 25, 1946, to Mar. 3, 1983, at site about 100 ft downstream, datum 5.0 ft higher. Apr. 11, 1983, to Sept. 30, 1987, at present site, at datum 5.0 ft higher. June 22, 1998, gage moved for bridge construction to right bank on downstream side of bridge, at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by irrigation development upstream from station and by storage in seven reservoirs in Colorado, Nebraska, and Kansas. Considerable regulation since 1952 by Harlan County Lake (station 06849000). Flow was affected by bridge construction May, 1998 to June, 1999. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1895, about 23 ft June 2, 1935, present site and datum, from information by U.S. Weather Bureau, discharge, about 207,000 ft³/sec, on basis of records for stations upstream. Flood of June 21, 1915, reached a stage of 19.1 ft, present site and datum, from information by U.S. Weather Bureau, discharge, about 60,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

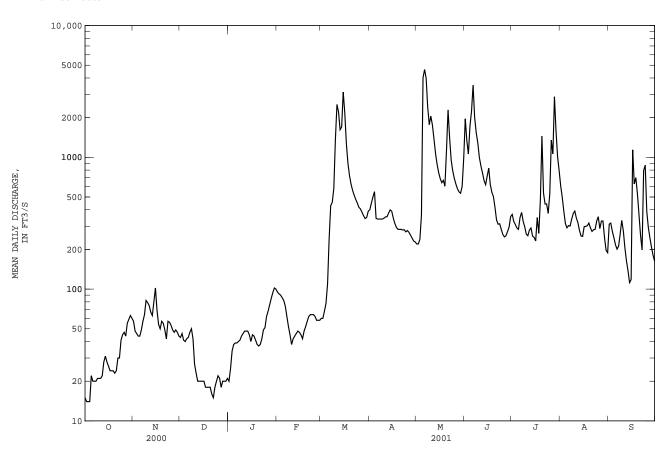
DAY OCT NOV DEC FEB MAY AUG SEP JAN JUL e20 e95 e60 e400 e25 e92 e60 e450 e34 e90 e68 e500 e38 e86 e78 e39 e82 e110 e39 e74 e240 e340 20 e62 e52 456 262 e40 e340 e340 e41 e42 e44 e45 e340 e27 e46 e38 e345 e23 e42 e20 e48 377 667 e44 e20 e46 e48 e47 e20 e40 e20 e45 e18 e44 e42 700 e18 e41 e48 e18 e38 e18 e37 e57 e16 e38 e62 e15 e42 e64 e18 e49 e64 e51 e20 e64 e22 e62 e62 e21 e68 e58 e18 e76 e58 e20 e85

e350

06856000 REPUBLICAN RIVER AT CONCORDIA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR		MAY		JUN	JUL	AUG	ī	SEP	٥
MEAN MAX (WY) MIN (WY)	543 5033 1974 14.5 1992	362 1725 1947 34.0 1992	285 1229 1994 26.7 2001	279 1003 1974 37.8 1957	468 1354 1949 59.9 2001	713 2766 1993 94.2 1992	701 4009 1987 75.9 1991		867 3458 1949 49.5 1956		1213 8464 1947 170 1988	1218 10740 1993 42.6 1954	638 352 1950 52.2 1959	1) 2	640 4143 1951 31.3 1991	3 L 3
SUMMARY	STATIST	ICS	FOR 2	2000 CALEI	NDAR YEAR	F	OR 2001	WATE	ER YE	AR		WATER	YEARS 1) 46	- 2001	L
	MEAN ANNUAL M ANNUAL MI			165			402					657 2339 117			1951 1991	
	DAILY M			3100	Jul 6		4640		May	6		55200			5 1947	
	DAILY MEA	AN Y MINIMUM		14 16	Oct 2 Sep 28		14 17		Oct Oct	2		9.0 10			4 1991 9 1991	
MAXIMUM	PEAK FLO	WC			~		5880		May	5		75000	Jı	in 2	5 1947	7
	I PEAK STA ANEOUS LO						11. 13	54	May Oct	5 3		14.			5 1947 2 1953	
	RUNOFF (A			119600			291300		OCL	3		476300	J 50	:P	2 1933	,
	ENT EXCE			270			1000					1410				
	ENT EXCEI			139 22			249 24					296 90				



06856600 REPUBLICAN RIVER AT CLAY CENTER, KS

LOCATION.--Lat $39^{\circ}21^{\circ}20^{\circ}$, long $97^{\circ}07^{\circ}34^{\circ}$, in SW $^{1}/_{4}$ NW $^{1}/_{4}$ Sec.17, T.8 S., R.3 E., Clay County, Hydrologic Unit 10250017, on right bank at downstream side of bridge on Kansas Highway 15, 1.0 mi south of Clay Center, 4.0 mi downstream from Five Creeks, and at mile 38.2.

DRAINAGE AREA. --24,542 mi², of which about 7,500 mi² is noncontributing.

AC-FT

PERIOD OF RECORD.--June 1917 to current year. Monthly discharge only for some periods, published in WSP 1310. Prior to February 1934, published as "at Wakefield." Gage-height records collected in this vicinity August 1904 to October 1917 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 806: Drainage area. WSP 1006: 1941. WSP 1310: 1922. WSP 1340: 1929, 1933-34.

GAGE.--Water-stage recorder. Datum of gage is 1,159.21 ft above sea level. See WSP 1919 for history of changes prior to Sept. 23, 1949. Sept. 23, 1949 to July 21, 1987, at site 200 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by irrigation development upstream from station and by reservoirs in Colorado, Nebraska, and Kansas. Flow moderately regulated since 1952 by Harlan County Lake (station 06849000). Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1895, 26.2 ft June 21, 1915, site and datum then in use, from information by U.S. Weather Bureau. Flood of May 29, 1903, reached a stage of 24.8 ft, site and datum then in use, from information by U.S. Weather Bureau.

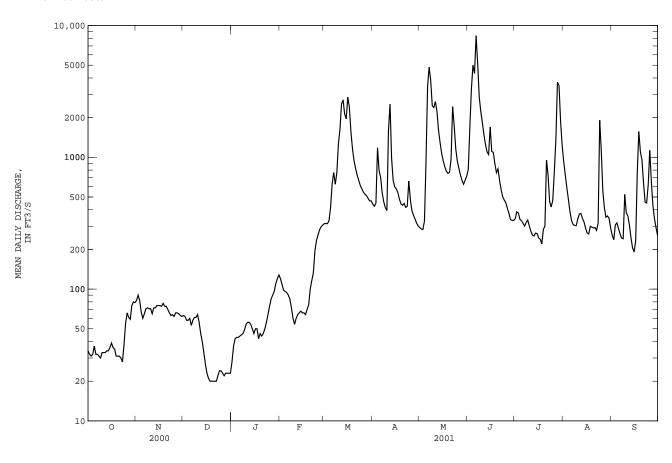
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY .TTTN TTTT. ATIG SEP e28 e120 e314 e37 e108 e314 e42 e98 e314 e43 e330 e96 e43 e94 e417 e9n e625 7 44ء e71 e45 e84 e768 e72 e46 e72 e71 e60 e49 e71 e64 e54 e54 33 e56 e56 e60 e72 e46 e56 e64 e72 e40 e66 e33 e75 e50 e75 e27 e46 e66 e75 e23 e50 e66 e74 e21 e50 e64 e78 e20 e42 e70 €74 e20 e46 e76 e74 e100 e20 e44 e70 e20 e46 e116 e50 e20 e66 e133 e22 e56 e195 e24 e64 e234 e23 e282 e84 e22 e298 e23 e96 e306 e23 e110 e23 e120 e23 e128 ------MEAN 40.9 70.4 37.1 59.5 20 MAX MIN

06856600 REPUBLICAN RIVER AT CLAY CENTER, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	670 7749 1974 7.64 1992	473 2293 1947 39.0 1992	391 1583 1994 37.1 2001	391 1615 1974 28.0 1957	667 2688 1993 73.4 1992	972 4795 1987 79.0 1992	1055 5797 1987 92.1 1954	1415 7170 1945 51.6 1992	2151 11320 1935 138 1988	1670 21590 1993 42.5 1954	927 4594 1993 13.4 1934	950 4920 1951 22.3 1956
SUMMARY	STATIST	ICS	FOR 2	2000 CALE	NDAR YEAR	F	OR 2001	WATER YEAR		WATER Y	EARS 1918	- 2001
	MEAN ANNUAL M ANNUAL MI			200			562			978 3724 191		1993 1991
	DAILY ME			2890 20	Jul 8 Dec 18		8370 20	Jun 6 Dec 18		103000	Jun Aug	3 1935 9 1934
ANNUAL MAXIMUM MAXIMUM		Y MINIMUM OW AGE		20	Dec 17		20 9990 15. 26	Dec 17 Jun 6		1.9 195000 25.7	Aug Jun 4 Jun	7 1934 3 1935 3 1935 10 1934
ANNUAL 10 PERC 50 PERC	RUNOFF (A ENT EXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCENTEXCE	AC-FT) EDS EDS		144900 338 160 33			407200 1420 300 34	OCC 23		708600 2010 470 130	o Aug	10 1934



06857050 MILFORD LAKE NEAR JUNCTION CITY, KS

LOCATION.--Lat $39^{\circ}04^{\circ}40^{\circ}$, long $96^{\circ}53^{\circ}30^{\circ}$, in SE $^{1}/_{4}$ sec.20, T.11 S., R.5 E., Geary County, Hydrologic Unit 10250017, in control tower of dam on Republican River, 5.0 mi northwest of Junction City, and at mile 7.7.

DRAINAGE AREA.--24,880 mi^2 , of which a large area is noncontributing.

PERIOD OF RECORD.--December 1966 to current year. Prior to October 1971, published as "Milford Reservoir."

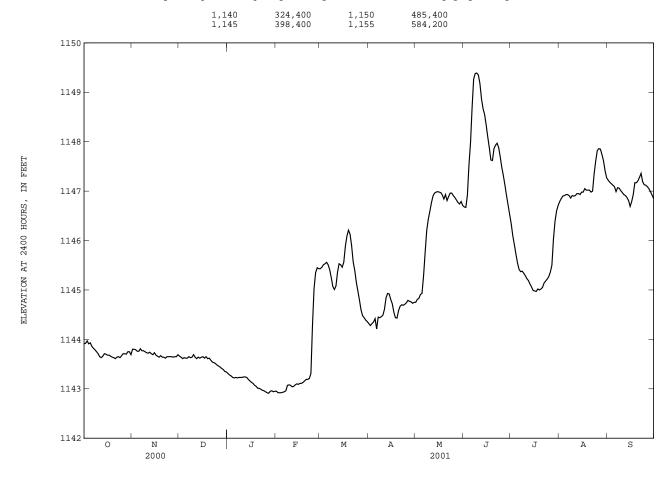
GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Jan. 16, 1967. Conservation pool elevation was reached July 15, 1967. Total capacity, 1,380,000 acre-ft below elevation 1,182.0 ft. Crest of uncontrolled spillway is at elevation 1,176.2 ft. Storage capacity of 673,600 acre-ft above elevation 1,144.4 ft is provided for flood control. Storage capacity of 415,400 acre-ft below elevation 1,144.4 ft is provided for conservation and recreation. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,181.94 ft July 25, 1993, contents, 1,346,000 acre-ft; minimum elevation since conservation pool first filled, 1,137.24 ft Feb. 26, 1988, contents, 287,400 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,149.40 ft June 9, contents, 474,400 acre-ft; minimum elevation, 1,142.89 ft Jan. 28, contents, 365,800 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet) (Computed by U.S. Army Corps of Engineers in 1982 from topographic maps)



06857050 MILFORD LAKE NEAR JUNCTION CITY, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1143.91	1143.80	1143.66	1143.31	1142.95	1145.43	1144.32	1144.75	1146.68	1146.34	1146.79	1147.22
2	1143.92	1143.80	1143.64	1143.28	1142.92	1145.46	1144.28	1144.81	1146.67	1146.10	1146.85	1147.18
3	1143.97	1143.79	1143.61	1143.26	1142.92	1145.51	1144.32	1144.83	1146.92	1145.92	1146.90	1147.15
4	1143.91	1143.76	1143.63	1143.23	1142.92	1145.53	1144.35	1144.91	1147.53	1145.73	1146.91	1147.12
5	1143.93	1143.76	1143.62	1143.22	1142.93	1145.56	1144.42	1144.93	1147.98	1145.55	1146.93	1147.09
6	1143.86	1143.81	1143.62	1143.23	1142.94	1145.51	1144.21	1145.29	1148.69	1145.42	1146.93	1146.99
7	1143.82	1143.77	1143.65	1143.22	1142.96	1145.41	1144.45	1145.76	1149.27	1145.37	1146.91	1147.07
8	1143.79	1143.77	1143.63	1143.23	1143.07	1145.25	1144.44	1146.20	1149.38	1145.38	1146.86	1147.06
9	1143.75	1143.75	1143.64	1143.23	1143.08	1145.07	1144.46	1146.43	1149.39	1145.34	1146.91	1147.01
10	1143.71	1143.73	1143.69	1143.23	1143.07	1145.01	1144.49	1146.59	1149.35	1145.29	1146.90	1146.97
11 12 13 14 15	1143.65 1143.63 1143.66 1143.71 1143.70	1143.71 1143.69	1143.64 1143.61 1143.64 1143.62 1143.64	1143.24 1143.24 1143.23 1143.19 1143.16	1143.04 1143.05 1143.08 1143.10 1143.09	1145.08 1145.36 1145.53 1145.51 1145.46	1144.61 1144.84 1144.93 1144.92 1144.81	1146.76 1146.90 1146.96 1146.98 1146.99	1149.18 1148.87 1148.67 1148.55 1148.34	1145.23 1145.19 1145.12 1145.06 1144.99	1146.91 1146.95 1146.95 1146.93 1146.98	1146.93 1146.91 1146.87 1146.81 1146.69
16 17 18 19 20	1143.68 1143.68 1143.66 1143.64 1143.63	1143.68 1143.66 1143.64 1143.67 1143.64	1143.65 1143.62 1143.65 1143.61 1143.62	1143.13 1143.11 1143.07 1143.05 1143.01	1143.11 1143.11 1143.13 1143.16 1143.19	1145.56 1145.88 1146.09 1146.21 1146.13	1144.72 1144.55 1144.44 1144.43 1144.58	1146.98 1146.97 1146.92 1146.84 1146.93	1148.10 1147.88 1147.63 1147.62 1147.86	1144.98 1144.97 1145.02 1145.00 1145.02	1146.98 1147.05 1147.02 1147.02	1146.79 1146.93 1147.17 1147.17
21	1143.61	1143.64	1143.58	1143.01	1143.19	1145.90	1144.67	1146.81	1147.93	1145.05	1146.98	1147.28
22	1143.64	1143.62	1143.54	1142.99	1143.21	1145.57	1144.70	1146.89	1147.97	1145.14	1147.00	1147.36
23	1143.65	1143.65	1143.53	1142.97	1143.31	1145.40	1144.69	1146.96	1147.88	1145.18	1147.35	1147.19
24	1143.63	1143.65	1143.51	1142.96	1144.28	1145.16	1144.71	1146.96	1147.69	1145.22	1147.61	1147.13
25	1143.67	1143.65	1143.48	1142.94	1145.03	1144.98	1144.74	1146.91	1147.48	1145.27	1147.82	1147.12
26 27 28 29 30 31	1143.71 1143.71 1143.70 1143.75 1143.75 1143.69	1143.65 1143.64 1143.65 1143.65 1143.69	1143.46 1143.44 1143.41 1143.39 1143.35 1143.34	1142.92 1142.91 1142.95 1142.96 1142.94 1142.95	1145.35 1145.45 1145.43 	1144.80 1144.60 1144.48 1144.44 1144.39 1144.36	1144.79 1144.77 1144.76 1144.73 1144.75	1146.87 1146.82 1146.77 1146.74 1146.79 1146.71	1147.31 1147.12 1146.91 1146.72 1146.53	1145.36 1145.50 1146.03 1146.39 1146.60 1146.71	1147.86 1147.85 1147.74 1147.61 1147.41 1147.27	1147.09 1147.05 1146.99 1146.92 1146.85
MEAN	1143.73	1143.70	1143.57	1143.11	1143.43	1145.31	1144.60	1146.42	1147.94	1145.47	1147.14	1147.04
MAX	1143.97	1143.81	1143.69	1143.31	1145.45	1146.21	1144.93	1146.99	1149.39	1146.71	1147.86	1147.36
MIN	1143.61	1143.62	1143.34	1142.91	1142.92	1144.36	1144.21	1144.75	1146.53	1144.97	1146.79	1146.69
(+)	377,800	377,800	372,500	366,700	405,300	388,200	394,400	426,700	423,700	426,700	436,300	429,100
(#)	-3,700	0	-5,300	-5,800	+38,600	-17,100	+6,200	+32,300	-3,000	+3,000	+9,600	-7,200

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

06857100 REPUBLICAN RIVER BELOW MILFORD DAM, KS

LOCATION.--Lat 39°04'15", long 96°52'00", Geary County, Hydrologic Unit 10250017, Fort Riley Military Reservation, on right bank at downstream side of bridge on U.S. Highway 77, 1.7 mi downstream from Milford Dam, 2.5 mi northwest of Junction City, and at mile 6.0.

DRAINAGE AREA.--24,890 mi^2 , of which a large area is noncontributing.

PERIOD OF RECORD. -- October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,045.70 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to Nov. 20, 1997, at datum 6.8 ft higher. Gage temporarily moved on Nov. 20, 1997 2.2 mi downstream during replacement of U.S. Highway 77 bridge.

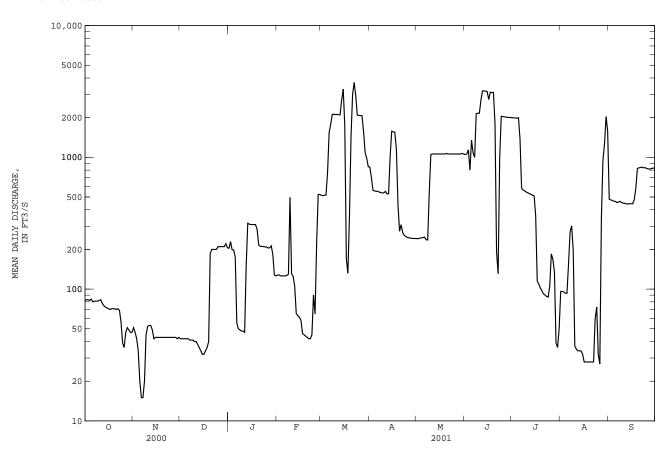
REMARKS.--Records good except those for estimated daily discharge, which are poor. Flow completely regulated since 1967 by Milford Lake (station 06857050), 1.7 mi upstream. Satellite telemeter at station.

		DISCHAR	GE, CUBI	C FEET PER		, WATER YE LY MEAN VA		R 2000 T	O SEPTEMBI	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	82 83 83 82 84	51 47 42 34 e20	42 42 42 42 42	204 229 199 198 175	128 128 126 126 126	515 512 516 517 771	843 705 562 556 552	242 241 244 245 246	1050 1060 1140 800 1350	2000 1990 1990 1980 2000	96 96 95 93	481 475 471 464 463
6 7 8 9	80 81 81 81 82	e15 e15 e20 45 52	42 41 41 41 40	55 50 49 48 48	126 127 130 497 131	1540 1780 2120 2120 2110	552 545 541 536 538	248 237 236 546 1050	1080 1000 2150 2160 2160	1370 582 564 556 545	155 272 302 197 37	453 459 463 453 449
11 12 13 14 15	83 78 75 73 72	53 53 49 42 43	e40 e38 e36 e34 e32	47 152 316 311 309	125 105 65 63 61	2120 2100 2100 2720 3300	552 528 529 1020 1580	1060 1060 1060 1060 1060	2700 3190 3190 3180 3150	538 531 523 516 511	35 34 34 34 32	448 443 443 445 444
16 17 18 19 20	71 70 71 71 71	43 43 43 43	e32 e34 e36 e40 185	309 309 308 282 216	58 46 45 44 43	1750 169 132 357 1450	1560 1550 1140 435 275	1060 1060 1060 1060 1070	2750 3120 3100 3110 1810	360 115 109 102 97	28 28 28 28 28	444 476 582 824 831
21 22 23 24 25	70 71 69 56 39	43 43 43 43	e200 e200 e200 e200 e210	211 211 210 209 209	42 42 45 90 65	3000 3700 2930 2090 2080	308 269 256 251 246	1060 1060 1060 1060 1060	191 131 995 2050 2040	92 90 88 87 106	28 28 59 73 32	839 842 832 835 822
26 27 28 29 30 31	36 47 51 49 47 47	43 43 43 42 43	e210 e210 e210 e210 221 206	205 206 213 184 128 126	218 523 523 	2070 2070 1570 1090 985 848	245 244 243 242 242	1060 1060 1060 1060 1070 1060	2030 2020 2010 2010 2000	185 168 134 39 36 50	27 348 957 1270 2040 1580	817 815 822 829 828
MEAN MAX MIN AC-FT	68.9 84 36 4240	40.8 53 15 2430	103 221 32 6350	191 316 47 11750	137 523 42 7630	1649 3700 132 101400	588 1580 242 35000	833 1070 236 51200	1958 3190 131 116500	582 2000 36 35810	264 2040 27 16240	610 842 443 36280

06857100 REPUBLICAN RIVER BELOW MILFORD DAM, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB		MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	813 5272 1974 30.2 1996	744 7732 1974 20.3 1995	798 2315 1974 9.63 1995	385 1492 1974 43.8 1997	605 2617 1974 15.1 1997		918 3324 1973 22.8 1997	1049 6071 1987 30.8 1992	1340 8283 1987 28.6 1992	1287 7770 1995 37.5 1992	1456 9746 1993 40.1 1989	1208 15420 1993 101 2000	759 7785 1993 59.7 1984
SUMMARY	STATISTI	ICS	FOR 2	2000 CALEI	NDAR YE	AR	F	OR 2001 W	NATER YEAR		WATER YE	ARS 1968	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT	ANNUAL ME ANNUAL ME DAILY ME SEVEN-DAY PEAK FLO PEAK STA ANEOUS LO	EAN EAN AN MINIMUM DW AGE DW FLOW		187 2330 15 27	Jan Nov Nov	6 6 3		587 3700 15 27 4210 8.9	Mar 22 Nov 6 Nov 3 Jun 20 1 Jun 20 Nov 6		949 4027 229 33300 3.2 8.9 33700 22.10 2.7	Sep Jan Jul Jun	1993 1991 26 1993 18 1985 21 1997 26 1993 22 1964 18 1985
10 PERC 50 PERC	RUNOFF (<i>F</i> ENT EXCEE ENT EXCEE	EDS EDS		135500 210 77 37				424800 2000 221 41			687700 2350 352 55		



Discharge

Gage height

06860000 SMOKY HILL RIVER AT ELKADER, KS

LOCATION.--Lat $38^{\circ}47^{\circ}33^{\circ}$, long $100^{\circ}51^{\circ}19^{\circ}$, in NE $^{1}/_{4}$ SE $^{1}/_{4}$ sec.34, T.14 S., R.32 W., Logan County, Hydrologic Unit 10260003, on right bank at downstream side of bridge on U.S. Highway 83, 22.3 mi south of Oakley, 0.1 mi downstream from Ladder Creek, and at mile 409.9.

DRAINAGE AREA. -- 3,555 mi².

PERIOD OF RECORD. -- October 1939 to current year.

REVISED RECORDS.--WSP 1310: 1941(M), 1947(M), 1949(M). WSP 1510: Drainage area.

Discharge

GAGE.--Water-stage recorder. Datum of gage is 2,622.62 ft above sea level. Prior to Oct. 1, 1986, water-stage recorder at site 100 ft downstream and at datum 2.00 ft higher and Oct. 1, 1986, to Sept. 30, 1995, water-stage recorder at site 100 ft downstream at same datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.—Maximum stage since at least 1937, 15.2 ft May 30, 1938, from floodmark, discharge, 71,000 ${\rm ft}^3/{\rm sec}$, on basis of slope-area measurement of peak flow, present datum.

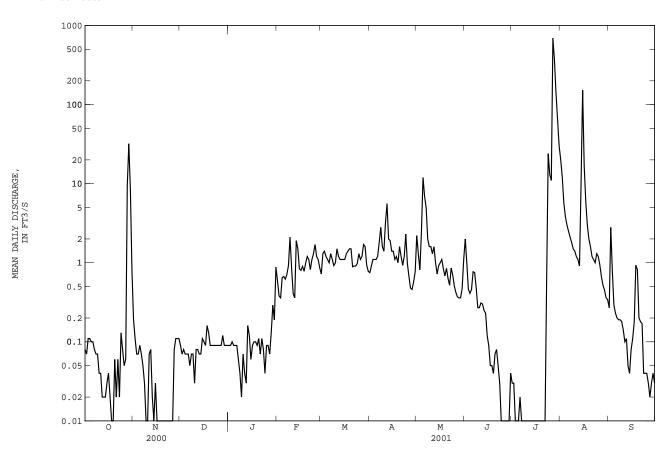
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ${\rm ft}^3/{\rm s}$ and maximum (*): Gage height

Date	Tim	ie	(ft ³ /s)	cag	(ft)		Date	Time		(ft ³ /s)	. cage	ft)
Jul 27	040	0	*2,390		*7.30		No oth	er peak gr	eater th	nan base d	ischarge.	
		DISCHA	RGE, CUBIC	FEET PE		WATER YEA Y MEAN VAL		R 2000 TO	SEPTEMBE	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.08 .07 .11 .11	.19 .11 .07 .07	.09 .07 .08 .07	.09 .09 .10 .09	.59 .38 .36 .65	.72 1.3 1.4 1.2	.75 .91 1.1 1.1	2.2 1.3 .81 2.5	2.0 .99 .46 .41 .46	.03 .03 .01 .00	20 12 5.7 3.8 3.0	.27 2.8 .78 .29 .23
6 7 8 9 10	.10 .08 .07 .07	.07 .05 .03 .00	.07 .05 .07 .07	.09 .06 .04 .02	.62 .71 .92 e2.1 e.87	1.0 1.3 1.1 .92 1.0	1.2 1.8 2.8 1.6 1.4	6.9 5.0 2.0 1.6 1.6	.77 .75 .48 .27	.02 .01 .00 .00	2.5 2.1 1.8 1.5	.20 .19 .19 .18
11 12 13 14 15	.04 .02 .02 .02 .03	.07 .08 .02 .00	.08 .08 .07 .07	.04 .03 .16 .12 .06	.41 .36 1.9 el.5 .84	1.5 1.2 1.1 1.1	3.2 5.6 2.0 1.9 1.4	1.3 1.6 1.0 .72 .92	.31 .30 .25 .23 .12	.00 .00 .00 .00	1.2 1.1 .91 9.9 152	.10 .11 .05 .04
16 17 18 19 20	.04 .02 .01 .01	.00 .00 .00 .00	.10 .09 .16 .13	.09 .10 .10 .09	.80 .90 .78 .99	1.1 1.3 1.4 1.5	1.4 1.1 1.2 1.0	1.0 1.1 .84 .68	.09 .05 .05 .04 .07	.00 .00 .00 .00	17 6.0 3.0 2.0 1.6	.11 .18 .93 .82
21 22 23 24 25	.02 .06 .02 .13	.00 .00 .00 .00	.09 .09 .09 .09	.07 .11 .08 .04	1.1 .82 1.1 1.3 1.7	.89 .91 .91 .98	1.2 .93 1.2 2.3 .98	.63 .52 .86 .70	.08 .05 .03 .01	.01 .00 .58 24	1.2 1.1 1.0 1.3	.18 .17 .04 .04
26 27 28 29 30 31	.05 .06 9.5 32 8.1 .79	.00 .08 .11 .11 .11	.09 .09 .12 .09 .09	.09 .07 .13 .29 .19	1.2 1.1 .86 	1.1 1.2 1.7 1.6 .93 .78	.67 .48 .46 .57 .77	.42 .37 .36 .36 .47	.00 .00 .00 .00	11 692 364 138 64 30	.94 .67 .52 .45 .36	.03 .02 .03 .04 .03
MEAN MAX MIN AC-FT	1.67 32 .01 103	.043 .19 .00 2.6	.086 .16 .03 5.3	.12 .88 .02 7.3	.95 2.1 .36 53	1.17 1.7 .72 72	1.46 5.6 .46 87	1.68 12 .36 104	.29 2.0 .00 17	43.1 692 .00 2650	8.31 152 .34 511	.28 2.8 .02 17

06860000 SMOKY HILL RIVER AT ELKADER, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	14.5 624 1947 .000 1940	3.53 34.3 1952 .000 1940	3.29 25.6 1952 .000 1940	3.73 30.1 1952 .000 1940	5.46 25.4 1942 .000 1986	8.92 158 1960 .000 1986	9.58 111 1942 .000 1986	27.9 387 1957 .000 1986	87.4 2410 1951 .000 1986	69.0 992 1957 .000 1954	35.0 580 1950 .000 1970	13.3 158 1949 .000 1943
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	DAR YEAR	FC	OR 2001 WA	TER YEAR		WATER YEA	RS 1940	- 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN				1.27			5.01			23.6 290 .000		1951 1986
HIGHEST	DAILY ME	EAN		32	Oct 29		692	Jul 27		13700	Jun	11 1951
	DAILY MEA	AN Y MINIMUM		.00	Nov 9 Nov 16		.00			.00	Oct Oct	1 1939 1 1939
MAXIMUM PEAK FLOW							2390	Jul 27		22300		23 1969
MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW							7.30			11.02		17 1955 t years
ANNUAL RUNOFF (AC-FT)				921			3630			17070		
10 PERCENT EXCEEDS				3.4			2.0			22		
	CENT EXCE			.25			.27			1.4		
90 PERC	CENT EXCER	EDS		.05			.01			.00		



06861000 SMOKY HILL RIVER NEAR ARNOLD, KS

LOCATION.--Lat $38^{\circ}48^{\circ}31^{\circ}$, long $100^{\circ}01^{\circ}13^{\circ}$, in SW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.29, T.14 S., R.24 W., Trego County, Hydrologic Unit 10260003, on left bank near downstream side of county highway bridge, 7.0 mi upstream from headwaters of Cedar Bluff Reservoir, 12 mi north of Arnold, and at mile 356.2.

DRAINAGE AREA. -- 5,220 mi², approximately.

PERIOD OF RECORD.--February 1950 to current year. Prior to October 1950, published as "near Ransom."

GAGE.--Water-stage recorder. Datum of gage is 2,196.13 ft above sea level. See WSP 1919 for history of changes prior to Sept. 30, 1961.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals and return flow from irrigated areas. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 30, 1938, reached a stage of about 19 ft, present site and datum, from information by local resident.

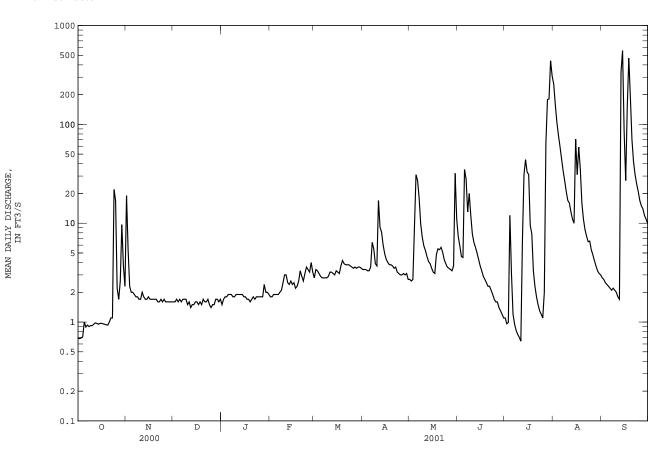
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s and maximum (*):

Date	Time		Discharge (ft ³ /s)	Gage	e height (ft)		Date	Time	<u>:</u>	Discharge (ft ³ /s)		Gage height (ft)	
Sep 13	230	0	*3,470		*6.84		No other peak greater than base discharge.						
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1 2 3 4 5	.69 .68 .69 .71	19 5.4 2.3 2.0 2.0	1.6 1.6 1.7 1.6	1.5 1.7 1.8 1.8	1.8 1.8 1.9 1.9	2.8 3.4 3.3 3.1 2.9	3.4 3.4 3.4 3.3 3.3	2.7 2.6 2.7 9.1	7.3 5.9 4.6 4.5 35	1.1 .96 .99 12 3.1	256 159 106 78 60	2.8 2.7 2.5 2.4 2.3	
6 7 8 9 10	.89 .93 .90 .92	1.9 1.8 1.8 1.7	1.6 1.7 1.7 1.7	1.9 1.9 1.8 1.8	1.9 2.0 2.1 e2.5 e3.0	2.8 2.8 2.8 2.8 2.9	3.6 6.4 5.5 3.9 3.7	27 18 9.8 7.2 5.9	28 13 20 12 7.8	1.2 .95 .82 .75	45 34 27 21 17	2.2 2.1 2.2 2.1 2.0	
11 12 13 14 15	.95 .98 .97 .95	2.0 1.8 1.7 1.7	1.6 1.4 1.5 1.5	1.9 1.9 1.9 1.9	e3.0 e2.5 2.4 2.6 2.4	3.2 3.2 3.1 3.0 3.3	17 9.1 8.1 6.0 4.9	5.3 4.6 4.1 3.9 3.5	6.4 5.7 5.0 4.3 3.7	.64 6.7 31 44 33	16 13 11 10 71	1.8 1.7 335 559 85	
16 17 18 19 20	.97 .96 .95 .94	1.7 1.7 1.7 1.7	1.6 1.5 1.6 1.5	1.8 1.7 1.7 1.6 1.7	2.5 2.2 2.3 2.6 3.3	3.2 3.1 3.7 4.2 3.9	4.3 4.0 3.8 3.8 3.7	3.2 3.1 4.8 5.5 5.4	3.3 2.9 2.7 2.5 2.3	31 9.5 7.8 3.3 2.3	31 59 35 16 11	27 150 468 186 70	
21 22 23 24 25	1.0 1.1 1.1 22	1.6 1.7 1.6 1.7	1.6 1.6 1.7 1.5	1.8 1.7 1.8 1.8	2.9 2.6 3.1 3.6 3.4	3.8 3.8 3.7 3.6	3.5 3.6 3.2 3.1 3.0	5.7 5.1 4.3 3.9 3.6	2.3 2.1 1.9 1.7 1.6	1.8 1.5 1.3 1.2	8.6 7.4 6.5 6.6 5.4	42 31 25 21 17	
26 27 28 29 30 31	2.2 1.7 2.6 9.7 3.7 2.3	1.6 1.6 1.6 1.6	1.5 1.5 1.7 1.7 1.6 1.7	1.8 1.8 2.4 2.0 2.0	3.2 4.0 3.2 	3.5 3.6 3.5 3.6 3.6	3.0 3.1 3.0 3.1 2.7	3.5 3.4 3.3 3.7 32	1.6 1.4 1.3 1.2	2.0 64 178 181 440 309	4.8 4.2 3.7 3.3 3.1 3.0	15 14 12 11 10	
MEAN MAX MIN AC-FT	2.65 22 .68 163	2.44 19 1.6 145	1.59 1.7 1.4 98	1.83 2.4 1.5 112	2.59 4.0 1.8 144	3.34 4.2 2.8 205	4.53 17 2.7 270	7.71 32 2.6 474	6.44 35 1.1 383	44.3 440 .64 2720	36.5 256 3.0 2250	70.2 559 1.7 4170	

06861000 SMOKY HILL RIVER NEAR ARNOLD, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	17.2 317 1966 .000 1989	7.57 55.0 1997 .000 1990	5.93 42.5 1951 .000 1989	6.38 57.4 1952 .000 1989	10.4 99.2 1966 .000 1989	22.2 584 1960 .000 1989	17.2 116 1958 .000 1989	68.0 934 1957 .080 1968	178 4331 1951 .013 1985	101 965 1951 .048 1988	53.8 452 1960 .060 1978	32.4 353 1957 .030 1956
SUMMARY	Y STATIST	ICS	FOR 2	2000 CALENI	DAR YEAR	F	OR 2001 WA	TER YEAR		WATER YEA	RS 1951	- 2001
	MEAN F ANNUAL I			11.4			15.4			43.4 550 .33		1951 1988
LOWEST	DAILY M	AN		374 .60	Jul 20 Sep 18		559 .64			14200	Jul 3	.2 1951 30 1952
MAXIMUN	SEVEN-DA M PEAK FL M PEAK ST.			.66	Sep 16		.80 3470 6.84	Sep 13		.00 23800 12.57	Jun 1	9 1952 .1 1951 .1 1951
INSTANT	FANEOUS L	OW FLOW		8300			.48			.00		years
10 PERG	CENT EXCE	EDS		22 5.3			26 2.8			47 2.4		
90 PER	CENT EXCE	EDS		.95			1.3			.01		



06861500 CEDAR BLUFF RESERVOIR NEAR ELLIS, KS

LOCATION.--Lat $38^{\circ}47^{\circ}24^{\circ}$, long $99^{\circ}43^{\circ}13^{\circ}$, in NE $^{1}/_{4}$ SW $^{1}/_{4}$ sec.36, T.14 S., R.22 W., Trego County, Hydrologic Unit 10260003, in control house structure of outlet works conduit at dam on Smoky Hill River, 18 mi southwest of Ellis, and at mile 333.7.

DRAINAGE AREA.--5,530 mi^2 , approximately.

PERIOD OF RECORD. -- November 1950 to current year (monthly records only prior to August 1960).

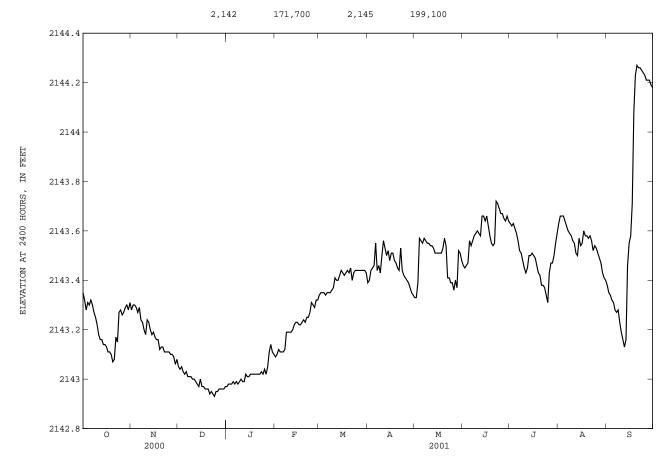
GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Bureau of Reclamation). Prior to Aug. 20, 1960, nonrecording mercury-column gage at same site and datum.

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Nov. 13, 1950. Dam was completed in 1951. Total capacity, 870,400 acre-ft, consisting of the following: Dead storage, 8,260 acre-ft below elevation 2,090 ft, sill of trashrack structure; irrigation pool, 176,800 acre-ft between elevations 2,090 ft and 2,144 ft; flood-control pool, 191,900 acre-ft between elevations 2,144 ft and 2,166 ft, crest of uncontrolled spillway and uncontrolled storage, 493,400 acre-ft between elevations 2,166 ft and 2,200 ft. Reservoir is used to store water for flood control, irrigation of 6,600 acres, and recreation. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 2,154.90 ft July 2, 1951, July 4, 5, 1957, contents, 269,400 acre-ft; minimum elevation since irrigation pool was first filled, 2,092.20 ft Sept. 28, 1992, contents, 10,450 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 2,144.29 ft Sept. 22, contents, 187,100 acre-ft; minimum elevation, 2,142.92 ft Dec. 25, contents, 177,800 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet) (capacity table placed in use October 1951)



06861500 CEDAR BLUFF RESERVOIR NEAR ELLIS, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2143.35	2143.28	2143.05	2142.97	2143.09	2143.34	2143.39	2143.33	2143.46	2143.63	2143.63	2143.38
2	2143.32	2143.30	2143.04	2142.98	2143.10	2143.35	2143.40	2143.33	2143.45	2143.62	2143.66	2143.35
3	2143.28	2143.30	2143.05	2142.98	2143.12	2143.35	2143.44	2143.39	2143.46	2143.63	2143.66	2143.34
4	2143.31	2143.29	2143.03	2142.98	2143.11	2143.35	2143.45	2143.57	2143.47	2143.61	2143.66	2143.32
5	2143.30	2143.27	2143.02	2142.99	2143.11	2143.34	2143.46	2143.56	2143.56	2143.59	2143.64	2143.31
6	2143.32	2143.29	2143.03	2142.98	2143.11	2143.35	2143.55	2143.55	2143.54	2143.56	2143.62	2143.28
7	2143.30	2143.24	2143.01	2142.99	2143.12	2143.35	2143.44	2143.57	2143.56	2143.52	2143.60	2143.27
8	2143.27	2143.23	2143.01	2142.98	2143.19	2143.35	2143.46	2143.56	2143.58	2143.51	2143.59	2143.28
9	2143.25	2143.20	2143.01	2142.99	2143.19	2143.36	2143.43	2143.55	2143.59	2143.48	2143.58	2143.23
10	2143.22	2143.18	2143.00	2143.00	2143.19	2143.37	2143.50	2143.55	2143.60	2143.45	2143.56	2143.19
11	2143.18	2143.24	2143.00	2142.99	2143.19	2143.41	2143.56	2143.54	2143.59	2143.43	2143.55	2143.16
12	2143.16	2143.23	2142.99	2142.99	2143.20	2143.40	2143.53	2143.54	2143.58	2143.45	2143.51	2143.13
13	2143.16	2143.20	2142.98	2143.02	2143.22	2143.40	2143.50	2143.53	2143.66	2143.50	2143.50	2143.16
14	2143.14	2143.18	2142.97	2143.01	2143.23	2143.42	2143.52	2143.51	2143.66	2143.50	2143.57	2143.46
15	2143.14	2143.19	2143.00	2143.01	2143.23	2143.44	2143.48	2143.51	2143.64	2143.51	2143.54	2143.55
16	2143.13	2143.17	2142.97	2143.02	2143.22	2143.43	2143.51	2143.51	2143.66	2143.50	2143.55	2143.58
17	2143.11	2143.16	2142.97	2143.02	2143.22	2143.42	2143.51	2143.51	2143.62	2143.49	2143.60	2143.71
18	2143.11	2143.16	2142.96	2143.02	2143.23	2143.43	2143.48	2143.51	2143.58	2143.46	2143.58	2144.08
19	2143.10	2143.12	2142.96	2143.02	2143.24	2143.44	2143.47	2143.53	2143.55	2143.43	2143.58	2144.23
20	2143.07	2143.13	2142.96	2143.02	2143.23	2143.43	2143.45	2143.57	2143.54	2143.42	2143.57	2144.27
21	2143.08		2142.94	2143.02	2143.25	2143.45	2143.44	2143.54	2143.55	2143.38	2143.58	2144.26
22	2143.17		2142.95	2143.02	2143.25	2143.40	2143.53	2143.41	2143.72	2143.38	2143.56	2144.26
23	2143.15		2142.94	2143.03	2143.27	2143.43	2143.44	2143.41	2143.71	2143.37	2143.52	2144.25
24	2143.27		2142.93	2143.02	2143.31	2143.44	2143.42	2143.39	2143.69	2143.34	2143.54	2144.24
25	2143.28		2142.95	2143.04	2143.30	2143.44	2143.41	2143.39	2143.67	2143.31	2143.53	2144.23
26 27 28 29 30 31	2143.26 2143.27 2143.29 2143.30 2143.28 2143.31	2143.10 2143.10 2143.09 2143.06 2143.08	2142.95 2142.96 2142.96 2142.96 2142.96 2142.97	2143.14 2143.11	2143.32	2143.44 2143.44 2143.44 2143.44 2143.44 2143.43		2143.36 2143.40 2143.37 2143.52 2143.51 2143.48	2143.67 2143.65 2143.64 2143.66 2143.64	2143.50	2143.51 2143.49 2143.47 2143.43 2143.41 2143.40	2144.21 2144.21 2144.21 2144.19 2144.18
MEAN	2143.22		2142.98	2143.02	2143.21	2143.40	2143.45	2143.48	2143.60	2143.49	2143.55	2143.72
MAX	2143.35		2143.05	2143.14	2143.32	2143.45	2143.56	2143.57	2143.72	2143.63	2143.66	2144.27
MIN	2143.07		2142.93	2142.97	2143.09	2143.34	2143.34	2143.33	2143.45	2143.31	2143.40	2143.13
(+)	180,400		178,100	179,000	180,500	181,200	180,600	181,500	182,600	182,300	181,000	186,300
(#)	-300		-700	+900	+1,500	+700	-600	+900	+1,100	-300	-1,300	+5,300

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

06862700 SMOKY HILL RIVER NEAR SCHOENCHEN, KS

LOCATION.--Lat $38^{\circ}42^{\circ}44^{\circ}$, long $99^{\circ}22^{\circ}53^{\circ}$, in SE $^{1}/_{4}$ SW $^{1}/_{4}$ sec.25, T.15 S., R.19 W., Ellis County, Hydrologic Unit 10260006, on right bank, 2.25 mi west of Schoenchen, and at mile 311.1.

DRAINAGE AREA.--5,750 mi².

PERIOD OF RECORD. -- July 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,922.48 ft above sea level. July 1964 to February 1985, water-stage recorder at site 1.2 mi upstream at different datum.

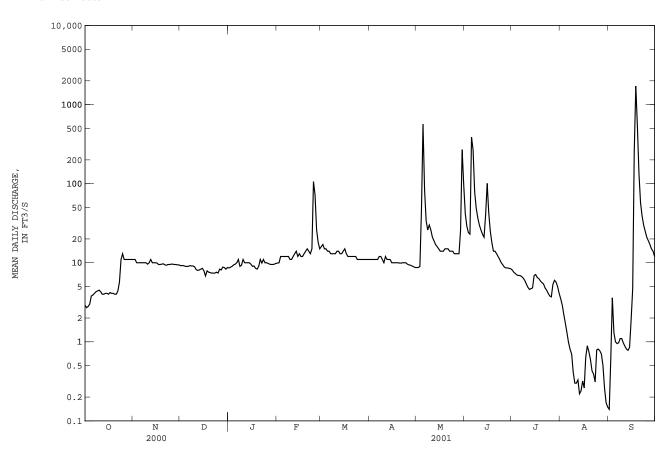
REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow mostly regulated since 1950 by Cedar Bluff Reservoir (station 06861500), 21.4 mi upstream. Natural flow also affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station. DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		DISCHA	RGE, CUBIO	C FEET PE	R SECOND, DAIL	WATER YE Y MEAN VA		ER 2000 TC	SEPTEMBE	R 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	2.9 2.7 2.8 3.0 3.8	11 11 10 10	9.2 9.2 9.2 9.0 9.0	e8.6 e8.8 e9.0 9.4 9.6	e9.9 10 12 12	16 17 15 15 14	11 11 11 11	8.7 8.7 9.0 46 565	42 29 24 23 387	8.1 7.6 7.3 7.0 6.9	3.5 2.9 2.2 1.7 1.3	.14 .61 3.6 1.3
6 7 8 9 10	3.9 4.1 4.3 4.4 4.5	10 10 10 10 9.6	9.0 9.2 9.1 9.1 8.9	10 11 9.0 9.3	12 12 12 e11 e11	14 13 13 13 13	11 12 e12 e11 e10	83 34 26 30 26	267 79 49 37 30	6.9 6.7 6.4 6.0 5.4	.98 .80 .70 .41	.95 .97 1.1 1.1 .97
11 12 13 14 15	4.3 4.0 4.0 4.1 4.1	10 11 10 10	e8.2 e8.0 e8.1 8.3 8.5	10 10 10 10 9.6	e12 e13 14 12 13	14 14 13 13	12 11 11 11 10	21 19 17 16 15	26 23 21 40 101	4.9 4.6 4.7 4.8 6.9	.30 .33 .22 .24 .32	.88 .81 .78 .85
16 17 18 19 20	4.0 4.2 4.1 4.1 4.0	9.9 9.5 9.5 9.6 9.7	7.9 6.8 7.9 7.6 e7.5	e9.0 9.1 8.5 8.3 9.0	12 12 13 14 15	15 13 12 12 12	10 10 10 10 9.9	14 14 14 15	43 25 18 14 14	7.1 6.5 6.3 5.9 5.6	.26 .64 .89 .75 .60	4.7 258 1720 535 135
21 22 23 24 25	4.0 4.4 5.7 11	9.4 9.3 9.5 9.6	7.4 e7.4 e7.4 7.6 7.4	11 9.9 11 10 10	14 13 15 106 72	12 12 12 11 11	9.9 10 10 10 9.6	15 14 14 14 13	13 12 11 10 9.4	5.4 4.8 4.5 4.1 3.8	.43 .39 .31 .79 .81	58 39 30 25 21
26 27 28 29 30 31	11 11 11 11 11	9.6 9.5 9.5 9.4 9.4	8.3 8.1 8.8 8.7 8.3 8.7	e9.8 e9.6 9.5 e9.6 e9.8	26 18 15 	11 11 11 11 11	9.4 9.3 9.1 8.9 8.7	13 13 13 26 270 97	8.8 8.6 8.5 8.4	3.7 5.3 6.0 5.7 5.0 4.1	.77 .70 .50 .26 .17	19 17 15 14 12
MEAN MAX MIN AC-FT	5.85 13 2.7 360	9.85 11 9.3 586	8.32 9.2 6.8 511	9.64 11 8.3 593	18.7 106 9.9 1040	12.9 17 11 791	10.4 12 8.7 616	48.3 565 8.7 2970	46.3 387 8.4 2760	5.74 8.1 3.7 353	.79 3.5 .15 49	97.3 1720 .14 5790

06862700 SMOKY HILL RIVER NEAR SCHOENCHEN, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	11.0 70.9 1974 .000 1992	15.6 122 1966 .000 1984	10.3 39.8 1974 .000 1992	10.9 53.2 1974 .11 1992	16.6 71.0 1966 .39 1992	27.5 226 1979 .38 1992	27.2 188 1998 .094 1989	22.3 102 1999 .31 1989	42.4 495 1970 .45 1991	53.2 710 1993 .11 1983	33.1 332 1998 .000 1983	14.4 97.3 2001 .000 1983
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	DAR YEAR	FC	OR 2001 WAT	TER YEAR		WATER YEA	ARS 1965	- 2001
	MEAN 'ANNUAL I			29.5			22.7			23.7 83.5 .49		1993 1991
	DAILY M			481	Jun 30		1720	Sep 18		11000	Jul	21 1993
	DAILY ME			1.4	Jun 23		.14	Sep 1		.00	Jul	4 1983
		Y MINIMUM		1.8	Jun 17		.28	Aug 10		.00	Jul	4 1983
	PEAK FLO						2100	Sep 17		20400		14 1970
	I PEAK ST						10.19	Sep 17		16.55		21 1993
	ANEOUS LO			21450			.11 16420	Sep 1		.00 17210	a	t times
	ENT EXCE	- ,		21450			23			29		
	ENT EXCE			12			9.9			11		
	ENT EXCE			3.4			1.1			.38		



06862850 SMOKY HILL RIVER BELOW SCHOENCHEN, KS

LOCATION.--Lat $38^{\circ}42^{\circ}46^{\circ}$, long $99^{\circ}17^{\circ}30^{\circ}$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.26, T.15 S., R.18 W., Ellis County, Hydrologic Unit 10260006, on right bank, 1.5 mi upstream from Big Timber Creek, 2.1 mi east of Schoenchen, and at mile 304.9.

DRAINAGE AREA. -- 5,810 mi².

AC-FT

366

581

605

PERIOD OF RECORD. -- October 1981 to current year.

GAGE. -- Water-stage recorder. Datum of gage is 1,885.17 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow mostly regulated since 1950 by Cedar Bluff Reservoir (station 06861500), 28.8 mi upstream. Natural flow also affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY SEP OCT NOV JAN FEB APR MAY AUG 2.0 12 8.4 e10 11 38 12 9.7 83 10 2.1 .10 1 e2.0 8.1 24 22 12 49 9.3 10 e9.6 11 1.8 .19 2.1 3 e2.0 9.8 8.9 e9.6 11 12 9.4 36 8.1 1.4 9.6 19 31 e2.0 e9.7 4 8.6 11 12 31 7.3 1.2 10 8.7 e10 11 18 12 767 423 .98 1.3 6 e2.0 9.9 8.6 11 17 13 .77 214 536 5.4 1.1 e11 e2.0 9.8 9.2 e12 e11 16 13 86 173 4.7 .55 1.2 8 e2 0 9.8 9.7 13 e10 16 13 54 102 4 1 36 1.2 49 3.7 e2.1 9.1 12 e10 15 73 .30 11 10 e2.3 9.2 7.9 14 e10 15 11 47 58 3.1 .28 12 11 e2.5 10 e7.6 e10 14 34 48 2.5 .28 .96 18 17 27 23 2.1 12 e2.8 11 e7.8 11 e10 13 39 .22 .84 13 11 .20 .74 e3.0 e8.2 11 e10 12 33 14 e3.4 11 e8.8 e10 e10 16 12 21 40 2.0 .21 .69 15 e3.7 11 e9.6 e10 17 12 19 126 3.5 .28 6.0 e9.2 17 5.3 27 16 e4.2 10 e10 e10 18 11 .20 e4.6 5.0 e9.2 9.4 e11 e12 17 15 11 12 16 16 57 39 .24 17 10 e11 4.6 119 18 10 2210 e11 3.8 9.9 e9.2 19 e11 e11 15 16 30 2.9 .20 20 4.8 9.2 e11 e9.6 e10 14 12 17 27 2.5 21 221 21 5.0 e10 e11 14 11 17 24 2.1 95 e11 .16 5.3 6.9 9.2 9.2 e11 e11 11 12 14 13 16 15 1.9 1.7 .18 22 14 21 22 52 23 14 15 18 35 9.2 29 e10 16 25 20 9.2 e10 11 137 13 11 15 15 1.4 .21 26 26 9.0 42 25 27 13 12 9.1 8.6 e12 e12 10 31 12 13 11 14 12 12 2.3 .18 24 28 11 14 21 84 10 29 12 8.4 e12 12 12 10 19 11 3.9 19 9.7 30 11 8.9 e12 12 ___ 12 219 11 3 6 15 18 31 11 2.8 e11 MEAN 5 95 9 76 9 85 10 7 21 5 16 3 12 1 65 3 75 1 3 83 46 122 12 7.6 20 12 14 137 38 21 767 536 2.1 2210 MAX 10 9.2 2.0 9.7 MIN 8.4 10 12 9.2 11 1.3 .13 .10

1000

721

4020

1190

661

7280

28

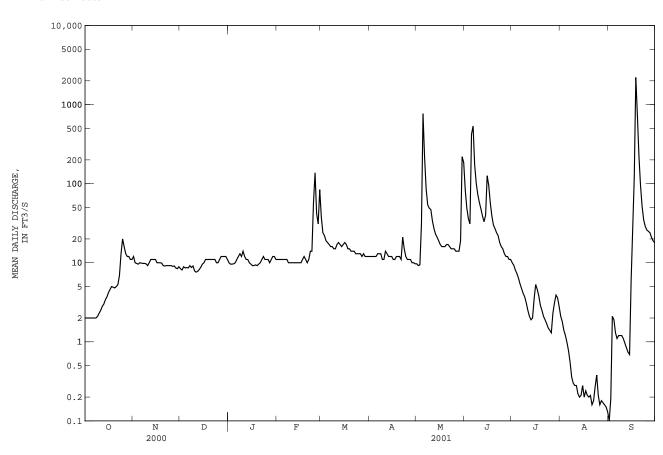
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06862850 SMOKY HILL RIVER BELOW SCHOENCHEN, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	3.43 20.8 1994 .000 1982	8.14 83.9 1997 .000 1984	4.95 17.4 1999 .000 1984	4.79 18.7 1999 .000 1984	9.55 44.0 1999 .000 1984	19.1 118 1993 .000 1985	32.7 234 1987 .000 1985	24.5 107 1999 .000 1985	21.0 140 1996 .000 1985	57.7 784 1993 .000 1988	40.9 266 1998 .000 1983	13.8 122 2001 .000 1983
SUMMARY	STATISTI	ICS	FOR 2	2000 CALENI	AR YEAR	FC	OR 2001 WAS	TER YEAR		WATER YEA	RS 1982	- 2001
	MEAN ANNUAL M ANNUAL ME			28.1			29.2			20.1 94.4 .001		1993 1991
	DAILY ME			411	Jul 1		2210	Sep 18		12000		21 1993
	DAILY MEA			.89	Jun 23		.10			.00	Oct	1 1981
	SEVEN-DAY 1 PEAK FLO			1.3	Jun 18		.15 2920	Aug 26 Sep 18		.00 20500	Oct	1 1981 21 1993
	I PEAK FIC I PEAK STA						10.62			17.60		21 1993
	ANEOUS LO						.06			.00		t years
ANNUAL	RUNOFF (A	AC-FT)		20410			21160	_		14580		=
10 PERC	CENT EXCEE	EDS		26			34			25		
50 PERC	CENT EXCEE	EDS		13			11			2.2		
90 PERC	CENT EXCEE	EDS		2.7			1.2			.00		



06863500 BIG CREEK NEAR HAYS, KS

LOCATION.--Lat $38^{\circ}51^{\circ}08^{\circ}$, long $99^{\circ}19^{\circ}05^{\circ}$, in NE $^{1}/_{4}$ SE $^{1}/_{4}$ NE $^{1}/_{4}$ sec.9, T.14 S., R.18 W., Ellis County, Hydrologic Unit 10260007, on right bank near downstream side of U. S. Highway 183 bridge, 0.6 mi south of intersection with Highway 183 alternate (bypass) in Hays, and at mile 44.9.

DRAINAGE AREA. -- 549 mi².

PERIOD OF RECORD. -- April 1946 to current year.

REVISED RECORDS. -- WSP 1340: 1947-48(P).

GAGE.--Water-stage recorder. Elevation of gage is 1,970 ft above sea level, from topographic map. Prior to Nov. 20, 1947, nonrecording gage, and Nov. 20, 1947, to Aug. 22, 1965, water-stage recorder and concrete control at site 0.7 mi downstream at datum 1,955.13 ft above sea level. From Aug. 23, 1965, to Sept. 30, 1998, at site 13.2 mi downstream at datum 1,915 ft above mean sea level.

Discharge

Gage height

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, many small diversions upstream from station, and return flow from irrigated areas. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Gage height

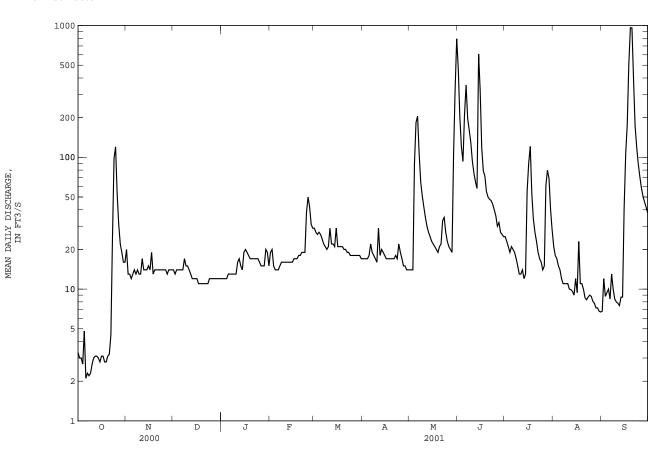
Discharge

Date	Time	е	(ft ³ /s)	Gage	(ft)		Date	Time		(ft ³ /s)		(ft)
May 31 Jun 14	153 190		818 888		L3.28 L3.73		Sep 19	2400		*1,150	*1	5.31
		DISCHA	ARGE, CUBIC	FEET PER		WATER YEA MEAN VAI		2000 TO S	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	3.3 3.0 3.0 2.7 4.8	20 13 13 12 13	14 13 14 14 14	e12 e12 e12 e12 e13	19 e20 15 14 14	29 27 26 27 26	17 17 17 17 18	14 14 14 89 184	472 203 120 93 211	25 23 21 19 21	21 18 17 15 14	6.8 12 8.8 9.4
6 7 8 9 10	2.1 2.3 2.2 2.3 2.7	14 13 14 13 13	14 14 17 15 15	e13 e13 e13 e13 e13	14 15 16 e16 e16	24 22 21 20 21	22 19 18 17 16	205 107 65 51 42	353 198 161 130 94	20 19 17 15 13	12 11 11 11 11	8.4 13 10 8.4 8.0
11 12 13 14 15	3.0 3.1 3.1 3.0 2.8	17 14 14 14 15	e14 e13 e12 e12 e12	e16 e17 e15 14 e19	e16 e16 e16 e16 e16	29 22 22 21 29	29 18 20 19 18	35 30 27 25 23	76 65 58 609 321	13 14 12 13 55	10 9.9 9.6 9.0	7.8 7.5 8.7 8.7
16 17 18 19 20	3.1 3.1 2.8 2.8 3.1	14 19 13 14 14	e12 e11 e11 e11	20 19 e18 e17 e17	e17 e17 e17 e18 e18	21 21 21 21 20	17 17 17 17 17	22 21 20 19 21	118 79 72 55 50	90 121 53 34 27	9.4 23 11 11 10	106 179 510 963 960
21 22 23 24 25	3.2 4.5 24 98 120	14 14 14 14	e11 e11 e11 e12 e12	e17 e17 17 17 e16	e19 e19 19 38 50	20 19 19 18 18	17 18 17 22 19	22 33 35 27 23	48 47 44 40 36	23 19 17 16 14	8.6 8.3 8.7 9.0 8.8	396 174 121 90 72
26 27 28 29 30 31	53 31 22 19 16	14 13 14 14 14	e12 e12 e12 e12 e12 e12	15 e15 e15 e20 19	42 31 29 	18 18 18 18 18	17 15 15 14 14	21 20 19 106 329 793	30 32 27 26 25	15 61 80 69 40 28	8.1 7.8 7.2 7.2 6.8 6.7	59 51 46 42 38
MEAN MAX MIN AC-FT	15.0 120 2.1 922	14.2 20 12 843	12.6 17 11 778	15.5 20 12 954	20.5 50 14 1140	21.6 29 17 1330	17.8 29 14 1060	79.2 793 14 4870	130 609 25 7720	32.5 121 12 2000	11.1 23 6.7 681	133 963 6.8 7890

06863500 BIG CREEK NEAR HAYS, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG SE
MEAN MAX (WY) MIN (WY)	22.0 465 1947 .55 1948	12.4 115 1997 1.33 1957	9.43 36.7 1998 .36 1957	10.0 59.7 1974 1.21 1957	15.0 113 1949 1.46 1955	23.5 173 1960 1.26 1957	27.0 298 1987 2.10 1954	48.3 520 1995 2.05 1956	100 1805 1951 1.74 1956	65.4 606 1993 1.04 1980	44.8 22. 266 18 1950 195 .97 .5 1955 195
SUMMARY	STATISTI	CS	FOR 2	2000 CALENI	DAR YEAR	FC	OR 2001 WAT	TER YEAR		WATER YEA	RS 1947 - 200
	MEAN ANNUAL N			19.9			41.7			33.4 238 3.05	195 199
HIGHEST	DAILY ME	EAN		120 1.9	Oct 25 Sep 18		963 2.1	Sep 19 Oct 6		10600	Jun 17 195 Feb 12 194
MAXIMUM MAXIMUM	PEAK FLO	AGE		2.0	Sep 15		2.5 1150 15.31	Oct 6 Sep 19 Sep 19		.00 22400 29.00	Feb 12 194 Jun 17 195 Jul 21 199
ANNUAL 10 PERC	ANEOUS LO RUNOFF (<i>I</i> ENT EXCEE	AC-FT) EDS		14450 39			1.9 30180 74	Oct 5		.00 24220 38	at time
	ENT EXCES			18 2.9			17 8.7			8.0 1.9	



06864050 SMOKY HILL RIVER NEAR BUNKER HILL, KS

LOCATION.--Lat $38^{\circ}47^{\circ}38^{\circ}$, long $98^{\circ}46^{\circ}50^{\circ}$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.33, T.14 S., R.13 W., Russell County, Hydrologic Unit 10260006, on left bank at downstream side of county highway bridge, 0.5 mi upstream from Sellens Creek, 6.5 mi southwest of Bunker Hill, and at mile 261.6.

DRAINAGE AREA. -- 7,075 mi².

PERIOD OF RECORD. -- October 1939 to current year. Prior to October 1974, published as "near Russell."

REVISED RECORDS. -- WSP 1340: 1941-42(M), 1944-45(M), 1950(P).

GAGE.--Water-stage recorder. Elevation of gage is 1,690 ft above sea level, from topographic map. Prior to Sept. 11, 1940, nonrecording gage and Sept. 11, 1940, to Sept. 30, 1974, water-stage recorder at site 4.7 mi upstream at datum, 1,689.05 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow moderately regulated since 1950 by Cedar Bluff Reservoir (station 06861500), 72.1 mi upstream. Natural flow affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of May 30, 1938, reached a stage of about 29.0 ft, from floodmarks, discharge, about 70,000 ft 3 /s, from rating curve extended above 37,500 ft 3 /s, site and datum of 1939-74.

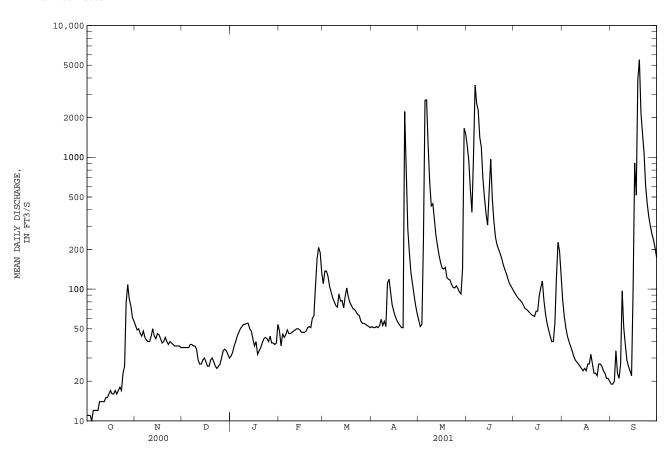
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	53	36	e31	48	110	52	58	1220	95	82	19
2	11	49	36	e33	37	137	51	52	932	91	62	19
3	11	50	36	e37	46	137	51	54	561	87	51	20
4	10	46	36	e40	43	125	52	239	383	84	44	34
5	12	44	36	e44	45	105	51	2710	1040	82	40	23
6	12	48	38	e47	49	95	53	2730	3530	79	37	21
7	12	43	38	e50	46	86	59	1230	2570	75	34	27
8	12	41	37	e52	e46	80	53	646	2270	71	31	97
9	14	40	37	e54	e47	75	57	428	1420	70	29	51
10	14	40	35	e54	e48	73	52	444	1190	68	28	38
11 12 13 14 15	14 14 15 15	44 50 44 42 46	e29 e27 e27 e29 e30	e55 55 e50 e48 42	e49 e50 e50 e49 e47	92 81 82 72 88	111 119 95 76 68	338 254 213 180 158	690 492 374 306 555	66 64 63 62 68	27 26 25 24 25	29 26 24 22 103
16	17	45	e28	37	e47	102	62	144	967	68	24	906
17	16	42	e26	40	e47	87	58	142	488	89	27	516
18	16	39	e26	32	e48	79	55	146	329	103	27	3900
19	17	40	e29	e34	51	75	53	122	249	115	32	5500
20	16	43	e30	e36	52	71	51	119	217	82	27	2170
21	17	40	e28	e39	51	70	51	117	201	65	23	1510
22	18	38	e26	e42	60	67	2230	108	186	55	23	1070
23	17	40	e25	e43	63	64	798	103	171	49	22	607
24	23	39	e26	e42	105	63	286	102	153	44	27	445
25	26	38	e27	40	169	57	189	106	141	40	27	355
26 27 28 29 30 31	79 108 84 75 61 57	37 37 37 37 36	e30 e34 e35 e34 e32 e30	44 39 e39 e38 e39 54	207 189 133 	55 55 54 53 52 51	133 110 90 75 65	101 95 92 143 1660 1510	131 119 110 105 100	40 55 123 227 192 126	26 24 23 21 21 20	301 263 237 206 174
MEAN	27.1	42.3	31.4	42.9	68.6	80.4	177	469	707	83.8	30.9	624
MAX	108	53	38	55	207	137	2230	2730	3530	227	82	5500
MIN	10	36	25	31	37	51	51	52	100	40	20	19
AC-FT	1670	2520	1930	2640	3810	4940	10520	28850	42050	5150	1900	37120

06864050 SMOKY HILL RIVER NEAR BUNKER HILL, KS

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

OCT NO	V DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN 100 54. MAX 1774 45 (WY) 1947 199 MIN .78 2.2 (WY) 1984 194	5 276 7 1974 7 2.00	38.1 349 1974 1.65 1940	73.2 716 1949 4.83 1940	140 1094 1979 8.83 1992	169 1970 1987 5.50 1940	218 1624 1951 5.29 1989	385 4415 1951 10.3 1983	366 3716 1993 1.85 1983	244 3157 1950 .57 1983	176 1519 1951 .34 1983
SUMMARY STATISTICS	FOR	2000 CAL	ENDAR YEAR	1	FOR 2001 V	WATER YEAR		WATER YE	ARS 1940	- 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINI MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLO ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS	W	95. 1710 10 11 69490 177 60 16	Jul 23 Sep 20 Sep 17		5500 10 11 6770 14.0 143100 345 52 23	Sep 19 Oct 4 Oct 1 Sep 19 Oct 3		167 1004 11.4 28400 .00 39500 27.14 .00 121000 273 36 7.5	Jan 2 Sep 2 May 2 Jul 2	1951 1983 22 1993 29 1940 11 1955 23 1951 22 1993 5 times



06864500 SMOKY HILL RIVER AT ELLSWORTH, KS

LOCATION.--Lat $38^{\circ}43^{\circ}36^{\circ}$, long $98^{\circ}14^{\circ}00^{\circ}$, in SW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.20, T.15 S., R.8 W., Ellsworth County, Hydrologic Unit 10260006, on left bank at downstream side of bridge on Kansas Highway 14 in Ellsworth, 2.0 mi downstream from Turkey Creek, and at mile 213.7.

DRAINAGE AREA. -- 7,580 mi², approximately.

PERIOD OF RECORD.--April 1895 to October 1905, July 1918 to July 1925, August 1928 to current year.

REVISED RECORDS.--WSP 796-B: 1903. WSP 806: Drainage area. WSP 1176: 1923. WSP 1440: 1895-1905, 1919, 1921, 1929-30(M), 1936-37(M).

GAGE.--Water-stage recorder. Datum of gage is 1,509.02 ft above sea level. Prior to Oct. 31, 1905, nonrecording gage at present site at datum 1.61 ft higher. July 23, 1918, to July 4, 1925, and Aug. 1, 1928, to Nov. 29, 1939, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow moderately regulated since 1950 by Cedar Bluff Reservoir (station 06861500), 120 mi upstream. Natural flow also affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

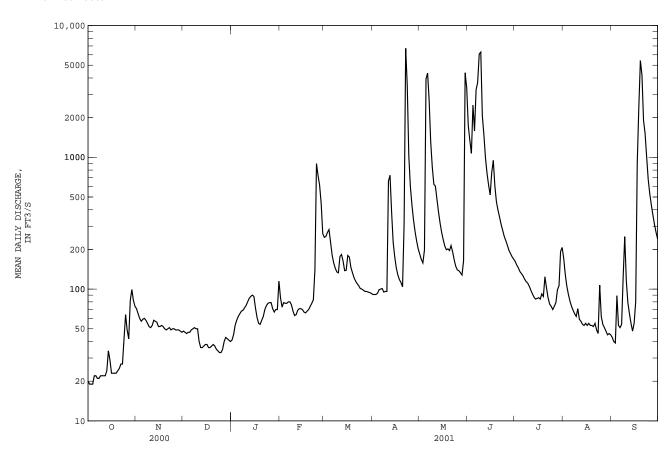
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1927 reached a stage of 25.7 ft, from floodmarks, discharge, 44,800 ft³/s.

		DISCHA	RGE, CUBIC	C FEET PEF		WATER YE MEAN VA		R 2000 TO) SEPTEMBE	R 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	71	48	e41	86	247	91	184	1740	162	171	43
2	19	65	47	e45	73	251	91	168	1350	152	129	40
3	19	60	46	e53	79	269	91	158	1070	145	105	39
4	19	57	47	e58	78	283	93	198	2490	136	91	89
5	22	59	47	e62	78	227	99	3930	1590	131	81	53
6	22	60	49	e65	80	181	100	4360	3260	126	74	51
7	21	58	50	e68	80	158	101	2710	3690	119	69	54
8	21	55	51	e69	e76	144	95	1310	6080	114	65	124
9	22	52	50	e72	e68	135	96	844	6290	111	62	250
10	22	51	50	e75	e63	133	96	625	2060	105	71	116
11	22	53	e40	e80	e64	177	660	604	1480	98	59	79
12	22	58	e36	e85	e69	183	731	479	987	92	57	65
13	24	57	e36	e88	e71	163	387	384	755	87	54	55
14	34	56	e37	e90	e71	138	227	316	614	84	53	48
15	29	52	e38	e88	e70	139	176	269	519	85	55	55
16	23	52	e38	e72	e67	180	145	237	767	86	53	80
17	23	53	e36	e61	e66	175	128	212	948	84	55	907
18	23	52	e36	55	e68	146	118	199	606	92	53	2410
19	23	50	e37	e54	e70	133	112	202	460	88	53	5430
20	24	49	e38	e58	e74	122	104	196	397	124	52	4220
21	25	50	e37	e62	78	115	311	214	352	102	55	1910
22	27	51	e35	e70	83	110	6720	192	310	86	49	1520
23	27	49	e34	e75	140	106	3530	167	279	77	46	1010
24	42	50	e33	78	897	101	1030	149	251	74	107	679
25	64	50	e33	79	729	100	599	140	233	70	62	529
26 27 28 29 30 31	49 42 82 99 82 74	49 49 49 48 47	e35 e40 e43 e42 e41 e40	79 71 e67 e70 70 115	613 446 264 	98 96 96 95 94 93	436 336 273 232 202	138 133 128 164 4380 3370	215 197 186 176 169	74 79 99 106 193 207	54 51 48 45 46 45	434 365 310 270 240
MEAN	34.4	53.7	41.0	70.2	168	151	580	863	1317	109	66.8	716
MAX	99	71	51	115	897	283	6720	4380	6290	207	171	5430
MIN	19	47	33	41	63	93	91	128	169	70	45	39
AC-FT	2120	3200	2520	4310	9320	9300	34530	53080	78390	6720	4110	42600

06864500 SMOKY HILL RIVER AT ELLSWORTH, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	152 1769 1947 5.06 1922	86.5 662 1997 9.30 1989	58.0 598 1974 7.94 1899	56.9 662 1974 4.32 1937	92.0 1099 1993 5.29 1899	180 2039 1973 16.4 1935	231 2709 1987 11.0 1923	391 2700 1903 11.4 1899	575 6270 1951 24.2 1988	484 5846 1993 5.10 1901	318 3300 1950 4.16 1983	263 2144 1951 1.68 1956
SUMMARY	STATISTI	ICS	FOR 2	2000 CALE	NDAR YEAR	F	OR 2001 WA	TER YEAR		WATER YEA	RS 1896	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT ANNUAL	ANNUAL ME ANNUAL ME DAILY ME DAILY ME	EAN EAN AN MINIMUM OW AGE OW FLOW AC-FT)		138 2320 19 20 100000 258	Mar 24 Oct 2 Sep 28		346 6720 19 20 12500 18.90 19 250200 668	Apr 22 Oct 2 Oct 1 Jun 8 Jun 8 Oct 1		241 1377 29.1 41800 .60 1.0 61000 27.20 .00 174800 419	Sep 2 Sep 2 Jun Jun	1951 1983 1 1938 18 1956 15 1956 1 1938 1 1938 18 1956
50 PERC	ENT EXCES	EDS		80 25			84 38			60 16		



06865000 KANOPOLIS LAKE NEAR KANOPOLIS, KS

LOCATION.--Lat $38^{\circ}36^{\circ}25^{\circ}$, long $97^{\circ}58^{\circ}02^{\circ}$, in SE $^{1}/_{4}$ NW $^{1}/_{4}$ NE $^{1}/_{4}$ sec.3, T.17 S., R.6 W., Ellsworth County, Hydrologic Unit 10260006, in con-trol tower at dam on Smoky Hill River, 12 mi southeast of Kanopolis, 25 mi southwest of Salina, and at mile 183.7.

DRAINAGE AREA. -- 7,857 mi².

PERIOD OF RECORD.--February 1948 to current year (monthly records only prior to October 1956). Prior to October 1971, published as "Kanopolis Reservoir."

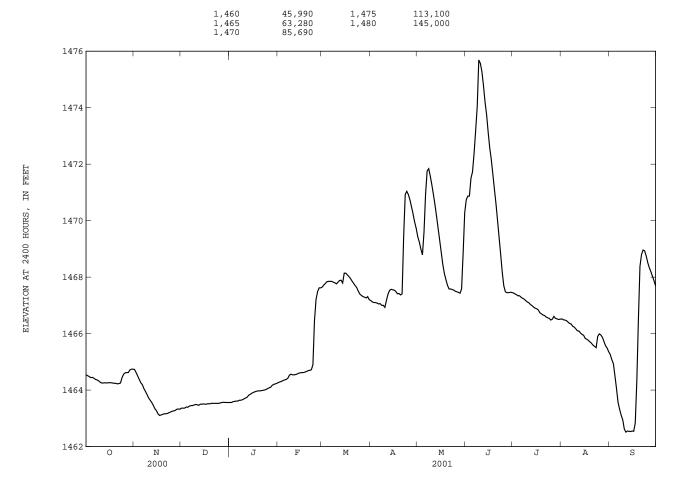
GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam. Storage began Feb. 17, 1948, and dam was completed in same year. Current conservation pool elevation first reached July 1948. Capacity, 425,700 acre-ft between elevations 1,415 ft, sill of outlet gage and 1,508 ft. Crest of uncontrolled spillway is at elevation 1,507 ft. Storage capacity of 356,700 acre-ft above elevation 1,463 ft is provided for flood control. Storage capacity of 55,200 acre-ft below elevation 1,463 ft is provided for conservation and recreation. Inflow partly regulated by Cedar Bluff Reservoir (station 06861500). Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,506.98 ft July 14, 1951, contents, 435,100 acre-ft; minimum elevation since conservation pool was first filled, 1,453.50 ft Sept. 30, 1988, contents, 29,870 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,475.72 ft June 10, contents, 117,490 acre-ft; minimum elevation, 1,462.46 ft Sept. 15, contents, 53,900 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet) (Based on survey made in 1971 by U.S. Army Corps of Engineers and revised in 1982)



06865000 KANOPOLIS LAKE NEAR KANOPOLIS, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1464.48 1464.44	1464.73 1464.62 1464.50 1464.38 1464.26	1463.36 1463.40	1463.59 1463.60	1464.31 1464.34	1467.65 1467.72 1467.78 1467.84 1467.85	1467.17 1467.12 1467.10 1467.10 1467.08	1469.43 1469.24 1468.99 1468.79 1469.60	1470.87 1470.87	1467.44 1467.41 1467.38 1467.34 1467.34	1466.49 1466.48 1466.46	1465.26 1465.08 1464.94 1464.51 1464.06
6 7 8 9 10	1464.38 1464.36 1464.33	1464.19 1464.05 1463.95 1463.84 1463.72	1463.45 1463.47		1464.53	1467.85 1467.85 1467.82 1467.80 1467.76		1470.95 1471.76 1471.84 1471.58 1471.27	1474.03 1475.69	1467.29 1467.25 1467.22 1467.17 1467.12	1466.36 1466.34 1466.26 1466.23 1466.17	1463.57 1463.32 1463.11 1462.95 1462.62
11 12 13 14 15	1464.26 1464.25	1463.64 1463.56 1463.46 1463.34 1463.27	1463.50 1463.50	1463.82			1467.18 1467.40 1467.53 1467.57		1474.20 1473.75	1467.09 1467.03 1466.99 1466.94 1466.90	1466.10 1466.09 1466.02 1465.97 1465.94	1462.51 1462.55 1462.54 1462.53 1462.55
16 17 18 19 20	1464.25 1464.24	1463.12			1464.64 1464.66	1468.02	1467.49 1467.41 1467.42	1468.88 1468.45 1468.13 1467.91 1467.71	1471.64 1471.11	1466.88 1466.84 1466.74 1466.70 1466.66	1465.76	1462.54 1462.83 1464.32 1466.48 1468.38
21 22 23 24 25		1463.16 1463.17 1463.20 1463.22 1463.25	1463.53 1463.53 1463.53 1463.53	1463.98 1463.99 1464.00 1464.02 1464.05	1464.70 1464.72 1464.90 1466.46 1467.21	1467.78 1467.70 1467.63 1467.50 1467.40		1467.58 1467.58 1467.56 1467.54 1467.50		1466.64 1466.59 1466.56 1466.54 1466.48	1465.55 1465.50	1468.80 1468.96 1468.93 1468.75 1468.51
26 27 28 29 30 31	1464.62 1464.62 1464.71	1463.26 1463.28 1463.32 1463.33 1463.32	1463.56 1463.56	1464.08 1464.10 1464.17 1464.20 1464.22 1464.24	1467.62	1467.35 1467.31 1467.29 1467.26 1467.31 1467.20	1470.49 1470.24 1469.95	1467.48 1467.46 1467.43 1467.58 1468.84 1470.28	1467.46	1466.51 1466.61 1466.54 1466.52 1466.50 1466.51	1465.87 1465.72	1468.33 1468.19 1468.03 1467.87 1467.69
MEAN MAX MIN (+) (#)		1463.59 1464.73 1463.10 59,930 -5,330	1463.57	1463.56 60,330	1465.03 1467.62 1464.27 74,400 +14,070	1467.20 72,520	1468.20 1471.04 1466.93 84,350 +11,830	1469.10 1471.84 1467.43 87,090 -2,740	1471.24 1475.69 1467.45 73,680 -13,410	1466.89 1467.44 1466.48 69,510 -4,170	1465.97 1466.52 1465.36 64,720 -4,790	1465.36 1468.96 1462.51 74,710 +9,990

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

06865500 SMOKY HILL RIVER NEAR LANGLEY, KS

LOCATION.--Lat $38^{\circ}36'38"$, long $97^{\circ}57'04"$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.35, T.16 S., R.6 W., Ellsworth County, Hydrologic Unit 10260008, on left bank at downstream side of county highway bridge, 0.8 mi downstream from Kanopolis Dam, 5.0 mi north of Langley, and at mile 182.9.

DRAINAGE AREA.--7,857 mi².

PERIOD OF RECORD. -- October 1940 to current year.

REVISED RECORDS. -- WSP 1310: 1942(M).

GAGE.--Water-stage recorder. Datum of gage is 1,395.66 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to Apr. 1, 1952, water-stage recorder at datum 7.00 ft higher. Apr. 1, 1952, to Oct. 1, 1973, water-stage recorder at datum 5.00 ft higher.

REMARKS.--Records good. Flow completely regulated since 1948 by Kanopolis Lake (station 06865000), 0.8 mi upstream. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1938 reached a stage of 33.9 ft, present datum, from information by U.S. Army Corps of Engineers, discharge, about 45,000 ft³/s by extension of subsequent rating curve above 16,000 ft³/s and correlation of peak flow at adjacent stations.

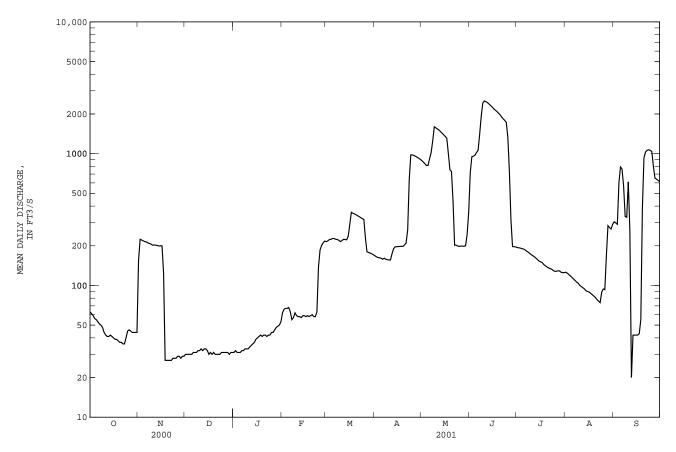
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		DISCHA	KGE, CUBIC	; reel Per		WAIER YE Y MEAN VA		JR 2000 IC	SEPIEMBE	R 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2	63 61	154 224	30 30	31 32	62 66	215 218	168 165	886 864	718 947	194 193	126 124	304 298
3	59	221	30	31	67	223	163	839	957	192	121	291
4	56 55	218 215	30 30	31 31	67 68	224 227	162 161	813 814	974 1020	190 189	118 115	600 792
5	55	215	30	31	08	221	101	814	1020	189	115	192
6	53	214	31	32	63	227	158	915	1060	186	112	765
7 8	51 50	210 208	31 31	32 33	55 57	224 223	161 158	1020 1250	1400 1920	182 179	109 106	564 334
9	48	208	32	33	62	223	158	1600	2420	175	106	334
10	44	202	32	33	59	215	156	1570	2510	171	100	611
11	42	203	33	34	58	219	156	1540	2480	168	98	260
12	42	203	33	35	58 58	219	174	1510	2440	165	98 96	20
13	41	201	33	36	57	223	190	1470	2380	161	94	42
14	42	199	33	37	59	222	196	1430	2320	157	91	42
15	41	200	32	39	59	236	197	1390	2260	153	90	42
16	40	200	30	40	58	290	197	1350	2190	151	89	42
17	39	125	31	41	59	359	198	1310	2140	149	87	43
18	39	27	30	42	58	353	198	1000	2090	144	85	55
19	38	27	31	41	59	349	198	755	2030	141	83	386
20	37	27	30	42	60	344	203	732	1980	138	81	929
21	37	27	30	42	58	338	210	433	1900	136	78	1030
22	36	27	30	41	58	333	264	202	1840	134	76	1060
23	36	28	30	42	63	327	636	202	1790	133	74	1070
24 25	40 45	28 28	31 31	42 44	138 186	321 317	979 979	199 198	1730 1340	130 128	89 94	1060 1040
25	40	20	31	44	100	31/	919	190	1340	120	24	1040
26	46	29	31	44	201	229	969	199	736	128	93	811
27	45	29	31	46	211	180	955	199	315	129	169	653
28	44	28	31	48	217	178	939	198	197	129	284	641
29 30	44 44	29 29	30 31	49 50		176 174	924 907	200 244	197 196	126 125	275 268	627 614
31	44		31	53		174	907	362	196	125	291	
MEAN	45.2	126	30.9	38.9	83.7	251	376	829	1549	155	123	512
MAX	63	224	33	53	217	359	979	1600	2510	194	291	1070
MIN	36	27	30	31	55	171	156	198	196	125	74	20
AC-FT	2780	7470	1900	2390	4650	15430	22370	50960	92190	9520	7580	30460

06865500 SMOKY HILL RIVER NEAR LANGLEY, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	295 3004 1952 15.1 1981	164 2139 1974 12.8 1992	133 1682 1974 8.62 1992	75.6 428 1974 7.65 1992	146 1254 1993 6.96 1992	189 1341 1973 5.84 1989	319 2310 1960 8.47 1989	368 2639 1987 8.79 1989	563 2932 1995 14.7 1989	491 3660 1951 21.9 1989	500 3716 1993 29.8 1980	396 3376 1951 16.4 1980
SUMMARY	STATISTI	ICS	FOR 2	2000 CALEI	NDAR YEAR	F	OR 2001 WAT	ER YEAR		WATER YEA	ARS 1949	- 2001
HIGHEST LOWEST HIGHEST LOWEST ANNUAL MAXIMUM	SUMMARY STATISTICS ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMU MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE			169 798 27 27	Mar 28 Nov 18 Nov 18		342 2510 20 27 2530 11.01	Jun 10 Sep 12 Nov 18 Jun 10 Jun 10		304 1392 23.6 6720 1.0 4.6 21800 32.20	Oct 1 Mar 1 Oct 1	1951 1989 26 1993 19 1966 20 1989 20 1941 20 1941
ANNUAL 10 PERC 50 PERC	ANEOUS LO RUNOFF (F ENT EXCES ENT EXCES ENT EXCES	AC-FT) EDS EDS		123000 357 130 31			7.9 247700 1020 156 31	Sep 11		.40 220000 820 79 24	Jan :	23 1948



06866500 SMOKY HILL RIVER NEAR MENTOR, KS

LOCATION.--Lat $38^{\circ}47^{\circ}54^{\circ}$, long $97^{\circ}34^{\circ}28^{\circ}$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.29, T.14 S., R.2 W., Saline County, Hydrologic Unit 10260008, on right bank at downstream side of county highway bridge, 4.0 mi north of Mentor, and at mile 101.7.

DRAINAGE AREA. -- 8,358 mi².

AC-FT

PERIOD OF RECORD.--December 1923 to October 1930, May 1931 to June 1932, October 1947 to current year. Published as "near Salina" 1948-49.

REVISED RECORDS.--WSP 1440: 1924, 1927-28, 1929(M), 1932(M). WSP 1919: 1960.

GAGE.--Water-stage recorder. Datum of gage is 1,211.40 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to June 30, 1932, non-recording gage at site 10 mi upstream at datum 20.9 ft higher. Oct. 1, 1947, to Sept. 18, 1948, nonrecording gage, and Sept. 19, 1948, to June 26, 1959, water-stage recorder at site 0.3 mi west on former channel, at present datum. June 27, 1959, to Sept. 8, 1959, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Considerable regulation since 1948 by Kanopolis Lake (station 06865000), 82.0 mi upstream. Diversions upstream from station for irrigation. Satellite telemeter at station.

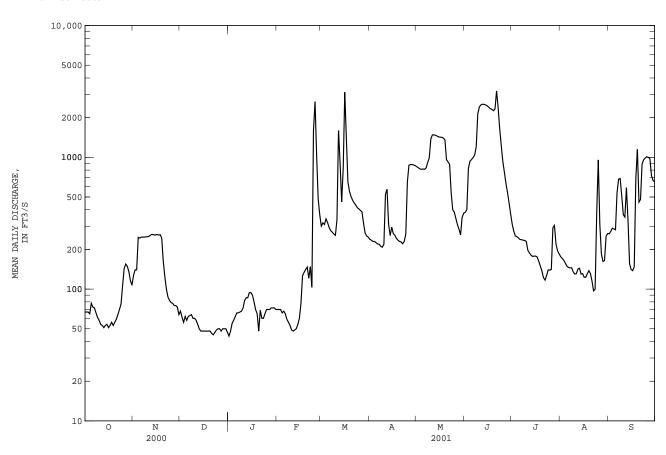
EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest known flood at Salina, 7.5 mi downstream occurred in 1844; second greatest known flood, May 29, 1903, reached a stage of 26.5 ft near Mentor, from floodmarks, site and datum of 1923-32.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV DEC FEB AUG SEP JAN APR MAY JUL e70 e311 e44 e48 e70 e275 e55 e253 e58 e250 e62 e244 e66 e238 270 211 e66 e59 e237 e67 e56 e235 e60 e68 e53 e234 e60 e72 e49 e230 e58 e82 e48 51 e54 e49 e50 311 1470 e50 e48 e48 e94 e60 e78 e48 e48 e48 e70 e48 e65 e48 e46 e45 e2390 e47 e1650 e60 e49 e65 e1230 e50 e70 e932 e50 e70 e770 e48 e70 e635 728 e72 e540 e50 e72 e451 e50 e72 ---e372 e70 MEAN 77.1 53.0 69.4 MAX MTN

06866500 SMOKY HILL RIVER NEAR MENTOR, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	359	222	169	123	207	318	400	513	721	605	620	460
MAX	3093	2063	1942	621	1459	2671	2756	2873	3590	5417	4226	3414
(WY)	1952	1974	1974	1974	1993	1973	1973	1987	1995	1951	1993	1951
MIN	20.5	22.1	13.0	14.3	20.3	16.0	17.1	22.2	52.5	27.9	12.6	35.5
(WY)	1992	1992	1992	1992	1992	1992	1989	1992	1988	1968	1989	1991
SUMMARY	STATIST	ICS	FOR 2	2000 CALEI	NDAR YEAR	F	OR 2001 WA	TER YEAR		WATER YE	ARS 1925	- 2001
ANNUAL	MEAN			296			418			399		
	'ANNUAL I	MEAN		250			110			1781		1993
	ANNUAL MI									35.6		1989
	DAILY M			6750	Mar 24		3190	Jun 21		18500	T., 1	3 1951
				45								
	DAILY MEA				Dec 22		44	Jan 1		1.4		0 1989
		Y MINIMUM		47	Dec 17		47	Dec 17		2.3		8 1989
	I PEAK FLO						3590	Jun 21		25500		7 1927
MAXIMUM	I PEAK STA	AGE					12.39	Jun 21		26.20	Aug 1	7 1927
INSTANT	ANEOUS LO	OW FLOW					33	Jan 19		1.0	Aug 1	0 1989
ANNUAL	RUNOFF (A	AC-FT)		214700			302900			288800		
10 PERC	ENT EXCE	EDS		529			1000			1010		
50 PERC	ENT EXCE	EDS		192			219			130		
90 PERC	ENT EXCE	EDS		60			54			40		



06866900 SALINE RIVER NEAR WAKEENEY, KS

LOCATION.--Lat $39^{\circ}06'22"$, long $99^{\circ}52'10"$, in NW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.10, T.11 S., R.23 W., Trego County, Hydrologic Unit 10260009, on left bank at downstream side of bridge on U.S. Highway 283, 1 mi upstream from Trego Creek, and 5 mi north of WaKeeney.

DRAINAGE AREA. -- 696 mi².

PERIOD OF RECORD. -- October 1955 to September 1966, October 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,217.46 ft above sea level. Oct. 1, 1955, to May 22, 1958, wire-weight and crest-stage gages and May 23, 1958, to Sept. 30, 1966, water-stage recorder at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, diversion for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

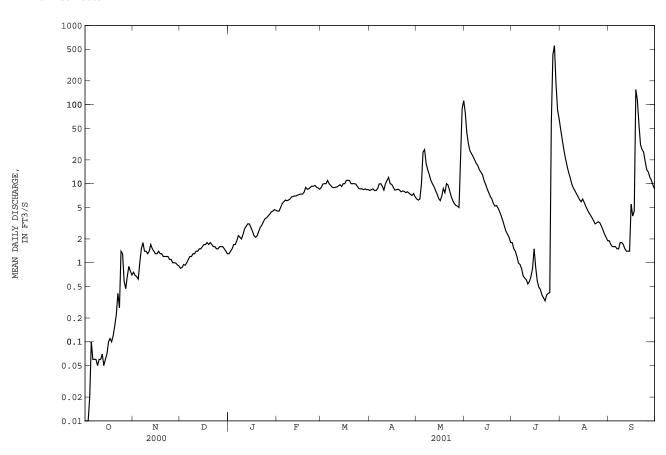
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1879, about 27 ft in July 1950, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DATLY MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP .76 .85 79 1.9 2 0.0 69 87 e1.4 e4.5 e9.9 8.4 6.2 44 1.5 36 .01 .67 .95 e5.0 e10 3 8.6 6.4 1.4 27 1.6 1.5 32 .02 .62 .93 e10 8.2 10 26 1.2 21 5 .10 1.0 1.0 1.7 5 9 11 8.2 25 24 .99 17 1.6 6 .06 1.5 6.2 10 8.7 27 22 .95 1.5 1.2 2.2 9.5 .06 1.8 6.1 9.9 18 20 .84 12 1.5 1.2 8 .06 1.4 2.1 6.2 9.0 10 .68 10 1.8 15 18 2.0 8.9 .05 1.4 1.3 e6.4 8.9 9.3 13 .64 1.3 10 .06 1.3 e6.8 9.0 8.3 11 15 .61 8.2 1.7 1.4 1.7 11 .06 e1.4 2 7 e6.9 9 1 10 10 14 .54 1.5 2.9 12 9.4 9.2 .07 e1.4 e7.0 11 13 .58 6.9 1.4 .05 3.1 9.7 13 1.5 e1.5 e7.0 12 8.2 11 .67 6.3 1.4 3.1 14 .06 e1.4 e1.5 e7.2 9.2 10 7 4 9 8 . 85 5.9 1.4 15 10 9.8 1.5 e7.3 6.5 8.6 5.5 .07 e1.3 1.6 6.4 16 10 1 3 1 7 e2.5 e2.2 e7.4 10 9 0 6.1 7.0 7 7 88 5 8 3 9 1.7 11 8.3 6.9 4.5 17 .11 1.4 e7.4 .59 5.2 .10 1.3 e7.8 8.4 8.7 6.4 4.7 18 1.8 e2.1 11 .49 1.3 8.5 5.6 5.2 19 12 1.7 e2.2 e9.0 11 7.7 .46 4.3 114 e2.5 20 .16 1.8 10 10 e8.5 .39 4.0 56 7 9 1.2 1 7 10 21 2.2 2.8 e8 6 9.6 5.3 36 3 7 31 22 .41 e1.6 3.0 10 8.1 8.2 4.9 3.4 27 e9.0 .33 23 .27 1.2 e1.6 3.3 e9.3 9.9 8.0 6.9 4.4 .39 25 24 1.4 $\frac{1.1}{1.1}$ e1.5 3.6 3.7 e9 3 9.3 8.7 7.7 7.9 6.1 3.9 .41 3.2 19 3.4 3.3 25 15 e1.5 e9.5 5.6 7.6 7.3 8 6 2 9 26 1 0 1 6 e3 9 e9 N 5.3 14 58 59 3 2 27 .47 1.0 1.6 e8.8 5.2 2.5 2.9 12 e4.1 8.6 428 28 .67 .99 1.6 e4.4 e8.5 8.4 7.1 5.0 2.3 557 2.6 11 e4.5 e4.7 7 5 21 9 5 29 .90 94 e1.5 8 6 2 1 181 2 3 30 .78 .91 e1.4 6.8 89 1.8 8.6 85 31 .70 e1.3 e4.6 ---8.4 112 66 1.9 MEAN .29 1.19 1.41 2.80 7.31 9.54 8.63 15.9 14.0 45.0 9.38 17.8 4.7 1.3 9.5 4.5 MAX 1.4 1.8 1.8 11 12 112 79 557 48 155 1.8 8.4 1.9 6.8 5.0 1.4 MIN .00 .62 .85 .33 172 977 830 2770 577

06866900 SALINE RIVER NEAR WAKEENEY, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	10.9 180 1966 .000 1957	4.84 22.6 1994 .000 1957	4.68 18.6 1994 .000 1957	5.19 20.1 1962 .000 1957	9.90 92.1 1966 .000 1957	19.5 335 1960 .000 1991	12.1 53.7 1998 .000 1991	42.6 359 1995 .000 1991	43.7 680 1957 .000 1991	51.7 441 1993 .000 1966	28.9 303 1961 .000 1991	16.0 104 1993 .000 1956
SUMMARY	STATIST:	ICS	FOR 2	2000 CALENI	DAR YEAR	FC	OR 2001 WAT	TER YEAR		WATER YE	ARS 195	6 - 2001
	MEAN ANNUAL M ANNUAL MI			7.28			11.1			20.9 98.8 .00	0	1957 1991
	DAILY ME			33	Mar 24 Sep 16		557 .00	Jul 28 Oct 1		8010		17 1957 28 1955
ANNUAL		MINIMUM		.00	Sep 14		.04	Oct 1 Jul 27		.00	Aug	23 1956 17 1957
MAXIMUM	PEAK STA	AGE					8.55	Jul 27 Oct 1		19.40	Jun	17 1957 17 1957 st years
INSTANTANEOUS LOW FLOW						8060	000 1		15170	IIIO	st years	
	ENT EXCEI			18 2.1			14 4.5			24 2.6		
90 PERC	CENT EXCE	EDS		.07			.60			.00		



06867000 SALINE RIVER NEAR RUSSELL, KS

LOCATION.--Lat $38^{\circ}58'00"$, long $98^{\circ}51'20"$, in SW $^1/_4$ SW $^1/_4$ NW $^1/_4$ sec.35, T.12 S., R.14 W., Russell County, Hydrologic Unit 10260009, on left bank at downstream side of bridge on U.S. Highway 281, 2.0 mi downstream from Salt Creek, 5.0 mi north of Russell, and at mile 190.6.

DRAINAGE AREA. -- 1,502 mi².

PERIOD OF RECORD.--October 1945 to September 1953, June 1959 to current year.

Discharge

REVISED RECORDS.--WSP 1919: 1960. WDR KS-92-1: 1988-89 (M), 1990-91 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,551.59 ft above sea level. Prior to Jan. 22, 1946, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Low flow partially regulated at times by irrigation. Satellite telemeter at station.

Discharge

Gage height

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

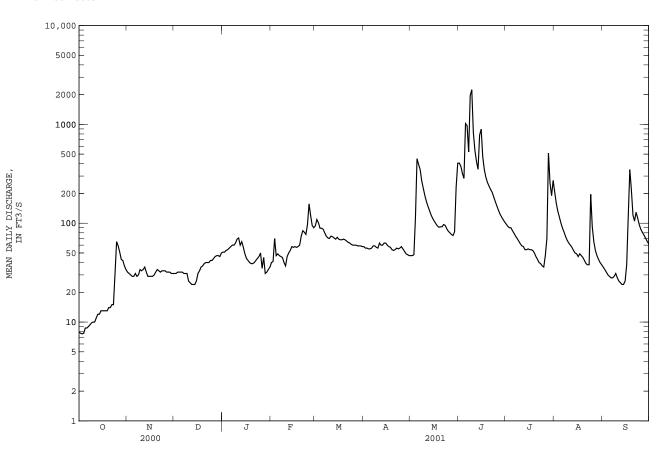
Gage height

Date	Time	9	(ft ³ /s)	dage	(ft)		Date	Time	е	(ft ³ /s)		ft)
Jun 9	0400)	*3,250	*1	5.00		No othe	er peak g	reater t	han base di:	scharge.	
		DISCHA	RGE, CUBIC	FEET PEF		WATER YEA MEAN VAI		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	7.9 7.7 7.6 7.7 8.7	32 31 30 29 29	e31 e31 e32 e32 32	51 51 53 54 56	e40 41 70 47 49	e94 109 101 89 89	58 56 56 55 55	47 47 48 114 449	407 377 319 284 1020	98 93 90 90 84	206 159 132 115 100	36 34 32 30 29
6 7 8 9 10	8.7 9.0 9.4 9.8	31 29 30 34 33	32 31 31 31 26	58 60 60 63 69	47 46 45 e40 e37	87 80 74 71 70	56 59 59 57 56	393 350 269 226 191	969 526 1960 2240 825	79 74 70 66 62	89 81 73 67 63	28 28 29 31 28
11 12 13 14 15	10 11 12 12 13	34 36 32 29 e29	25 e24 e24 e24 e26	71 60 65 57 49	46 50 53 58 57	74 73 71 69 72	63 60 60 63 63	166 148 134 121 112	548 421 351 777 896	59 58 54 54 55	60 57 53 50 49	26 25 24 24 26
16 17 18 19 20	13 13 13 13 14	e29 e29 e30 e32 34	31 33 36 37 39	e44 e42 e40 e39 e39	58 57 58 60 74	69 68 68 69 68	60 58 57 54 53	105 99 94 91 92	472 349 292 259 238	54 54 53 50 46	46 49 47 45 42	38 118 348 217 121
21 22 23 24 25	14 15 15 31 65	33 32 33 33 33	40 40 40 42 42	e40 e42 e44 e46 e50	84 81 77 97 157	66 64 63 61 60	54 56 55 56 58	92 97 95 88 83	220 206 185 166 150	43 40 39 37 36	39 38 38 196 92	105 129 113 97 87
26 27 28 29 30 31	59 51 43 42 37 34	32 32 32 31 31	44 46 47 47 46 50	e35 e45 e31 e32 e34 e36	120 e95 e90 	60 60 59 59 59	55 52 49 48 47	80 77 75 82 231 404	136 124 116 109 103	47 70 513 254 190 271	65 53 47 43 40 38	81 76 71 66 62
MEAN MAX MIN MED AC-FT	19.9 65 7.6 13 1220	31.5 36 29 32 1870	35.2 50 24 32 2170	48.9 71 31 49 3010	65.5 157 37 58 3640	72.1 109 58 69 4430	56.3 63 47 56 3350	152 449 47 99 9320	502 2240 103 334 29840	93.0 513 36 59 5720	73.3 206 38 53 4510	72.0 348 24 37 4280

06867000 SALINE RIVER NEAR RUSSELL, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	65.7 1077 1947 1.05 1992	43.2 238 1997 .96 1991	35.0 174 1974 1.92 1991	35.9 206 1974 2.28 1992	58.6 453 1949 1.97 1992	87.2 561 1960 2.49 1992	103 969 1987 3.29 1992	137 1617 1995 4.06 1992		202 3011 1951 8.82 1989	211 3737 1993 1.69 1991	121 1257 1950 1.45 1991	75.2 778 1951 .94 1991
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	DAR YEAR	F	OR 2001 WAT	ER YE	AR		WATER YEA	ARS 1946	- 2001
	MEAN ANNUAL MEANNUAL ME			60.3			101				98.8 561 5.25		1951 1991
	DAILY ME			274	May 2		2240	Jun	9		23400	Jul	22 1993
LOWEST	DAILY MEA	AN		6.9	Sep 20		7.6	Oct	3		.10	Aug	11 1964
ANNUAL	SEVEN-DAY	Y MINIMUM		7.2	Sep 17		8.2	Oct	1		.27	Aug	7 1964
	I PEAK FLO						3250	Jun	9		41500		21 1993
	I PEAK STA						15.00	Jun	9		25.73		21 1993
	ANEOUS LO						7.5	Oct	1		.00	Aug	11 1964
	RUNOFF (A	- ,		43770			73360				71580		
	ENT EXCE			121			193				165		
	ENT EXCE			52			55				32		
90 PERC	ENT EXCE	EDS		9.6			28				4.8		



06868100 WILSON LAKE NEAR WILSON, KS

LOCATION.--Lat $38^{\circ}58^{\circ}00^{\circ}$, long $98^{\circ}29^{\circ}35^{\circ}$, in NE $^{1}/_{4}$ NW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.36, T.12 S., R.11 W., Russell County, Hydrologic Unit 10260009, in the control tower near right end of Wilson Dam on the Saline River, 10 mi north of Wilson, and at mile 153.9.

DRAINAGE AREA. -- 1,917 mi².

PERIOD OF RECORD.--December 1964 to current year. Prior to October 1971, published as "Wilson Reservoir."

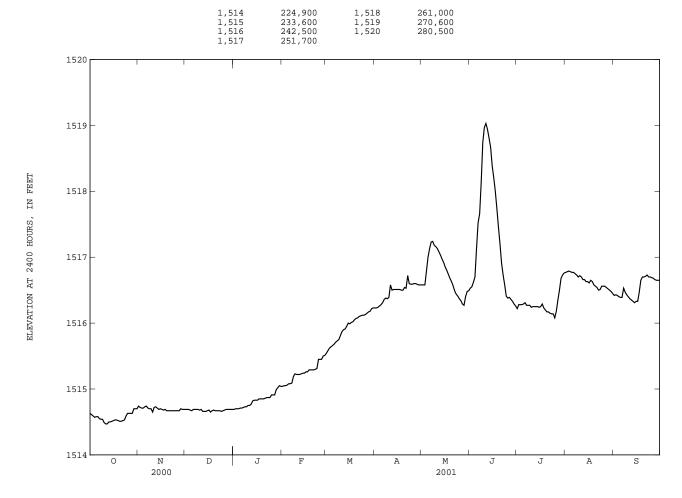
GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam. Storage began Dec. 29, 1964. Total capacity, 1,667,000 acre-ft below elevation 1,587.5 ft, con-sisting of 1,420 acre-ft of dead storage below elevation 1,450 ft; conservation pool, 241,100 acre-ft between elevation 1,450 ft and 1,516 ft; flood-control pool, 1,245,000 acre-ft between 1,516 ft and 1,582 ft, crest of spillway; and surcharge capacity of 179,500 acre-ft between 1,582 ft and 1,587.5 ft. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,548.23 ft Aug. 6, 1993, contents, 663,600 acre-ft; minimum elevation since conservation pool first filled, 1,493.59 ft Dec. 26, 1966, contents, 91,500 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,519.05 ft June 11, contents, 271,100 acre-ft; minimum elevation, 1,514.46 ft Oct. 12, contents, 228,800 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet) (Based on survey by U.S. Army Corps of Engineers during July 1984)



06868100 WILSON LAKE NEAR WILSON, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1514.59	1514.74 1514.72 1514.71 1514.71 1514.73		1514.69 1514.70 1514.70 1514.70 1514.71	1515.04 1515.05 1515.05 1515.06 1515.08	1515.54 1515.58 1515.62 1515.64 1515.66	1516.23 1516.23 1516.24 1516.26 1516.28	1516.58 1516.58 1516.58 1516.79 1517.00	1516.53 1516.55 1516.62 1516.70 1517.13	1516.22 1516.28 1516.28 1516.28 1516.29	1516.77 1516.78 1516.79 1516.78 1516.77	1516.42 1516.43 1516.42 1516.40 1516.39
6 7 8 9 10	1514.54	1514.71 1514.70	1514.69 1514.69 1514.69 1514.69	1514.71 1514.72 1514.73 1514.73	1515.08 1515.09 1515.19 1515.23 1515.22	1515.68 1515.71 1515.73 1515.75 1515.81	1516.31 1516.36 1516.38 1516.37 1516.39	1517.13 1517.23 1517.24 1517.18 1517.16	1517.52 1517.66 1518.14 1518.74 1518.97		1516.77 1516.75 1516.73 1516.70 1516.72	1516.39 1516.53 1516.47 1516.43 1516.40
11 12 13 14 15	1514.47 1514.47 1514.50 1514.50 1514.51	1514.72 1514.73 1514.71 1514.69 1514.70	1514.69 1514.66 1514.66 1514.66 1514.67	1514.75 1514.77 1514.82 1514.83 1514.83	1515.22 1515.22 1515.23 1515.24 1515.24	1515.87 1515.90 1515.91 1515.95 1516.00	1516.58 1516.50 1516.51 1516.51 1516.51	1517.13 1517.08 1517.03 1516.97 1516.92	1519.03 1518.94 1518.81 1518.67 1518.39	1516.25 1516.25 1516.25 1516.25 1516.24	1516.70 1516.66 1516.66 1516.63 1516.63	1516.37 1516.35 1516.33 1516.31 1516.33
16 17 18 19 20	1514.53 1514.52	1514.69 1514.68 1514.69 1514.67 1514.67	1514.68 1514.65 1514.67 1514.68 1514.67	1514.83 1514.85 1514.85 1514.85 1514.85	1515.26 1515.26 1515.29 1515.29 1515.29	1515.99 1516.01 1516.02 1516.05 1516.07	1516.51 1516.51 1516.50 1516.50 1516.54	1516.85 1516.80 1516.74 1516.68 1516.63	1518.21 1518.00 1517.74 1517.46 1517.20	1516.25 1516.29 1516.23 1516.20 1516.17	1516.61 1516.65 1516.63 1516.58 1516.56	1516.33 1516.47 1516.65 1516.70 1516.70
21 22 23 24 25	1514.51 1514.52 1514.53 1514.59 1514.63	1514.67 1514.67 1514.67 1514.67 1514.67	1514.67 1514.67 1514.67 1514.66 1514.67	1514.86 1514.87 1514.87 1514.87 1514.91	1515.29 1515.30 1515.31 1515.45 1515.45	1516.08 1516.10 1516.11 1516.12 1516.12	1516.53 1516.72 1516.60 1516.59 1516.59	1516.57 1516.49 1516.44 1516.41 1516.37	1516.91 1516.73 1516.58 1516.41 1516.38	1516.17 1516.15 1516.14 1516.14 1516.08	1516.54 1516.50 1516.51 1516.56 1516.56	1516.71 1516.73 1516.70 1516.70
26 27 28 29 30 31	1514.70	1514.67	1514.68 1514.69 1514.69 1514.69 1514.69	1514.91 1514.91 1514.99 1515.02 1515.05 1515.04		1516.13 1516.15 1516.17 1516.18 1516.22 1516.23	1516.60 1516.60 1516.59 1516.58 1516.58	1516.34 1516.29 1516.27 1516.40 1516.48 1516.49	1516.39 1516.36 1516.33 1516.29 1516.26	1516.18 1516.35 1516.50 1516.68 1516.73 1516.76		1516.68 1516.66 1516.65 1516.65 1516.65
MEAN MAX MIN (+) (#)		1514.69 1514.74 1514.65 230,900	1514.68 1514.69 1514.65 230,900	1514.83 1515.05 1514.69 233,900 +3,000	1515.25 1515.51 1515.04 238,100 +4,200	1515.94 1516.23 1515.54 244,600 +6,500	1516.47 1516.72 1516.23 247,800 +3,200	1516.74 1517.24 1516.27 247,000 -800	1517.39 1519.03 1516.26 244,900 -2,100	1516.29 1516.76 1516.08 249,500 +4,600	1516.63 1516.79 1516.45 246,600 -2,900	1516.52 1516.73 1516.31 248,400 +1,800

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

06868200 SALINE RIVER AT WILSON DAM, KS

LOCATION.--Lat $38^{\circ}58^{\circ}35^{\circ}$, long $98^{\circ}29^{\circ}20^{\circ}$, in NE $^{1}/_{4}$ SE $^{1}/_{4}$ sec.25, T.12 S., R.11 W., Russell County, Hydrologic Unit 10260010, on right bank 0.5 mi downstream from outlet of Wilson Dam, 9.0 mi upstream from Wolf Creek, 10 mi north of Wilson, and at mile 153.4.

DRAINAGE AREA. -- 1,917 mi².

MIN

AC-FT

PERIOD OF RECORD. -- March 1963 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,437 ft above sea level, from topographic map. Prior to May 12, 1965, water-stage recorder at site 1.5 mi downstream at different datum. Satellite telemeter at station.

REMARKS.--Records good. Flow completely regulated since 1964 by Wilson Lake (station 06868100), 0.5 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV JAN FEB MAY JUL AUG SEP 9.3 9.2 8.9 2.0 217 9.4 9.0 8.7 8 9 9.4 8.9 8.8 9.4 9.1 9.7 9.7 9.8 8.9 8.8 9.9 9.5 9.2 8.9 9 9 9.5 9 5 8 9 9.8 9.4 8.9 9.5 9.8 9.2 9.5 8.9 9.5 9.6 8.9 7.2 9.2 11 26 9.4 8.9 9.3 9.3 7.8 9.1 7.8 9.0 8.7 9.4 7.8 9.5 9.1 9.0 7.9 9.0 8.8 9.4 11 11 355 1560 26 56 9.1 8.8 8.1 9.1 8.7 9.5 8.2 9.5 9.1 8.3 9.1 9.1 8.6 9.5 9.6 11 27 57 8.2 9.1 8.5 9.7 9.5 8.8 9.9 9.4 9.4 9.1 9.1 8.8 8.9 9.9 9.4 8.9 9.9 9.3 9.2 8.9 8 8 ___ 8.9 MEAN 9 49 9 22 8 93 9 35 11 1 11 0 16 4 45 4 54 5 50 2 7.2 9.8 9.6 MAX

8.7 575

2.0

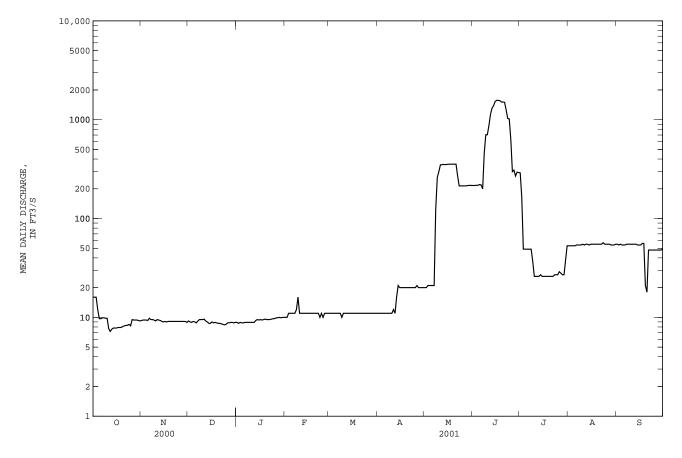
8.9

8.4

06868200 SALINE RIVER AT WILSON DAM, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY)	59.3 1557 1994	65.0 1508 1994	92.7 1636 1994	74.5 1341 1994	61.5 703 1974	59.3 774 1993	114 1444 1973	124 1107 1987	147 1143 1987	111 1401 1995	115 1226 1993	65.6 1233 1993
MIN (WY)	3.53 1968	2.43 1968	5.07 1966	3.35 1965	4.15 1965	2.10 1968	2.97 1967	3.15 1967	3.57 1967	3.27 1967	3.60 1967	4.80 1967
SUMMARY	STATIST	ICS	FOR	2000 CALEN	DAR YEAR	FC	OR 2001 WA	TER YEAR		WATER YEA	RS 1964	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT	ANNUAL MANNUAL MANNUAL MAILY MEA DAILY MEA SEVEN-DAN PEAK FLO PEAK STA ANEOUS LO	EAN EAN AN Y MINIMUM DW AGE DW FLOW		488 7.2 7.7	Mar 26 Oct 12 Oct 11		104 1570 7.2 7.7 1610 12.28 .50	Jun 16 Oct 12 Oct 11 Jun 18 Jun 18 Sep 20		90.8 641 5.36 2920 1.0 1.2 3320 18.84	Apr Aug Jun Apr Apr Nov	1994 1967 14 1973 3 1964 1 1968 6 1973 6 1973 8 1978
10 PERC 50 PERC	RUNOFF (A ENT EXCEI ENT EXCEI ENT EXCEI	EDS EDS		43950 176 43 9.0			75410 269 11 8.9			65790 190 17 5.2		



06869500 SALINE RIVER AT TESCOTT, KS

LOCATION.--Lat $39^{\circ}00^{\circ}15^{\circ}$, long $97^{\circ}52^{\circ}26^{\circ}$, in NE $^{1}/_{4}$ SE $^{1}/_{4}$ SE $^{1}/_{4}$ sec.16, T.12 S., R.5 W., Ottawa County, Hydrologic Unit 10260010, on right bank at downstream side of county highway bridge, 0.5 mi south of Tescott, 0.5 mi upstream from Dry Creek, and at mile 68.5.

DRAINAGE AREA. -- 2,820 mi².

PERIOD OF RECORD. -- September 1919 to current year.

REVISED RECORDS.--WSP 806: Drainage area. WSP 856: 1931. WSP 1310: 1926-28(M), 1935(M), 1945(M), 1947-48(M). WSP 1919: 1922, 1960

GAGE.--Water-stage recorders. Datum of gage is 1,265.34 ft above sea level. Prior to Nov. 23, 1934, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some diurnal fluctuation caused by power plants upstream from station. Diversions upstream from station for irrigation. Flow moderately regulated since 1964 by Wilson Lake (station 06868100), 85.4 mi upstream. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 13, 1951, was greatest known since at least 1903 and exceeded the flood of May-June 1903 by about 1.0 ft, from information by local residents.

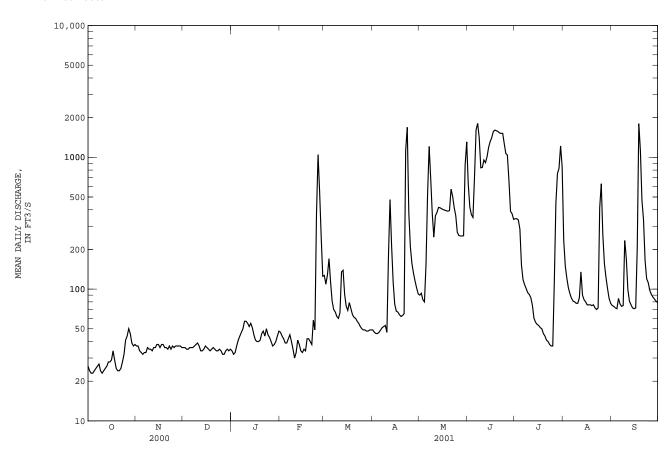
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		DISCHA	KGE, CUBIC	, reel re		Y MEAN VA		.K 2000 IC	, SEFIEMBE	M 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	37	36	e34	47	127	49	90	623	342	235	75
2	24	37	36	e32	e44	109	47	93	420	342	150	74
3	23	34	35	e33	e42	128	46	83	367	335	121	72
4	23	33	35	e37	39	170	46	80	350	285	102	71
5	24	32	36	e41	e39	113	47	154	713	152	92	85
6	25	33	36	e44	e42	81	49	526	1620	118	85	77
7	26	33	36	e47	45	70	51	1210	1810	108	81	74
8	27	36	37	e50	e40	67	52	691	1410	101	80	75
9	24	35	38	57	e35	62	53	372	833	94	78	234
10	23	35	39	57	e30	60	47	248	838	91	78	171
11	24	34	e37	55	e33	66	178	360	955	86	86	99
12	25	36	e34	52	e41	135	478	382	911	75	135	81
13	26	36	e34	55	e38	139	215	417	1010	60	90	76
14	28	38	e35	51	e34	91	113	414	1190	56	83	72
15	28	38	e37	45	e33	74	77	407	1320	54	80	71
16	29	36	e36	e41	e35	69	68	401	1410	53	76	72
17	34	38	e35	e40	e34	79	67	397	1570	51	76	206
18	29	38	e34	40	e42	71	64	393	1610	50	76	1800
19	25	36	e35	41	42	64	62	390	1590	46	75	1130
20	24	36	e36	46	e40	61	63	395	1570	44	76	471
21	24	35	e35	48	e38	60	65	574	1530	41	72	335
22	25	37	e34	44	58	57	1130	507	1520	40	70	165
23	28	35	e34	50	49	55	1690	416	1520	38	72	120
24	32	37	e35	45	365	52	381	361	1270	37	416	112
25	41	36	e34	43	1050	50	209	270	1070	37	630	98
26 27 28 29 30 31	44 50 46 39 37 38	37 37 37 37 36	e32 e32 e34 e35 e34 e35	e40 37 e38 e40 e44 48	551 250 125 	49 49 48 48 49	156 132 115 102 92	255 253 253 254 873 1310	1040 666 389 373 338	114 451 752 827 1220 848	258 156 123 101 85 78	91 87 84 81 79
MEAN	29.7	35.8	35.2	44.4	116	77.5	198	414	1061	224	130	211
MAX	50	38	39	57	1050	170	1690	1310	1810	1220	630	1800
MIN	23	32	32	32	30	48	46	80	338	37	70	71
AC-FT	1830	2130	2160	2730	6470	4760	11790	25450	63150	13780	7970	12570

06869500 SALINE RIVER AT TESCOTT, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	144 1650 1994 4.77 1925	101 1639 1994 5.60 1925	95.3 1736 1994 6.16 1935	90.9 1540 1994 2.32 1925	114 984 1974 12.5 1938	164 1698 1960 8.74 1935	232 2445 1973 10.6 1968	366 2054 1961 8.44 1967	512 6756 1951 12.2 1966	431 6589 1951 11.6 1966	259 2363 1928 7.13 1924	230 2131 1951 5.83 1924
SUMMARY	STATISTI	CS	FOR 2	2000 CALE	NDAR YEAR	FO	OR 2001 W	ATER YEAR		WATER YEA	ARS 1920	- 2001
SUMMARY STATISTICS ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN				133			214			226 1590 19.8		1951 1966
HIGHEST	DAILY ME	CAN		2320	Mar 24		1810	Jun 7		47600		L3 1951
	DAILY MEA			22	Sep 13		23	Oct 3		.00		22 1935
		MINIMUM		22	Sep 13		24	Oct 1		1.9		5 1934
	PEAK FLO						2670	Apr 23		61400 30.14		13 1951 23 1993
							20.2 22	4 Apr 23 Oct 10		.00		5. 1936
	INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT)			96420			154800	000 10		163800	1000	, 1000
	ENT EXCEE			319			644			448		
50 PERC	ENT EXCEE	EDS		90			62			58		
90 PERC	ENT EXCE	EDS		25			34			15		



06870200 SMOKY HILL RIVER AT NEW CAMBRIA, KS

LOCATION.--Lat $38^{\circ}51^{\circ}49^{\circ}$, long $97^{\circ}28^{\circ}58^{\circ}$, in NE $^{1}/_{4}$ NE $^{1}/_{4}$ Sec.1, T.14 S., R.2 W., Saline County, Hydrologic Unit 10260008, on left bank at downstream side of county highway bridge, 1.0 mi southeast of New Cambria, 10.1 mi upstream from Gypsum Creek, about 18.1 mi upstream from Solomon River, and at mile 86.6.

DRAINAGE AREA. -- 11,730 mi², approximately.

PERIOD OF RECORD. -- October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,160.19 ft above sea level. Prior to Mar. 27, 1963, nonrecording gage and Mar. 27, 1963, to July 5, 1977, water-stage recorder at site 2.7 mi downstream at datum 2.23 ft lower.

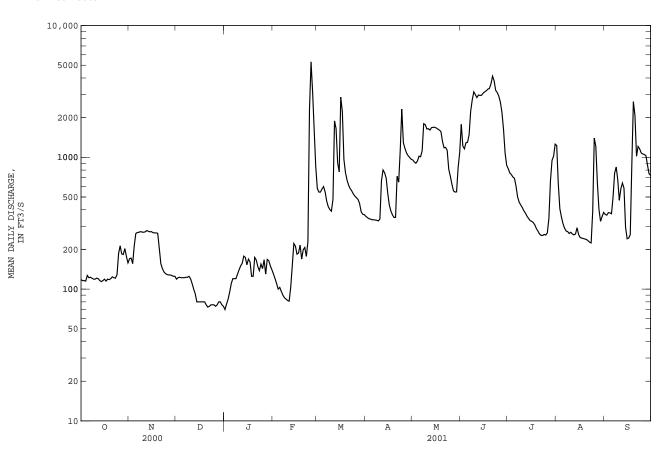
REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow moderately regulated since 1948 by Kanopolis Lake (station 06865000), 97.7 mi upstream, and slightly regulated since 1964 by Wilson Lake (station 06868100) and by numerous diversions upstream from station. Satellite telemeter at station.

		DISCHA	RGE, CUBIO	C FEET PE		WATER YE Y MEAN VA		R 2000 T	O SEPTEMBE	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	170	119	e70	e130	581	357	955	1780	820	1230	369
2	116	172	122	e77	e120	545	349	923	1220	762	632	364
3	116	156	123	e84	e110	545	342	902	1160	740	408	380
4	115	213	122	e95	e100	575	340	939	1290	709	353	379
5	127	264	122	e110	e103	600	336	1020	1300	693	314	373
6 7 8 9	122 123 121 119 119	269 270 273 271 270	122 123 123 125 e120	e120 e120 e120 e130 e140	e96 e90 e86 e84 e82	546 465 422 402 390	336 334 333 329 340	1010 1120 1800 1770 1640	1480 2230 2720 3140 2990	604 501 457 435 416	290 276 273 264 270	497 758 845 680 472
11	121	272	e110	e150	e81	479	664	1650	2840	393	262	578
12	120	278	e100	157	e103	1890	802	1610	2970	377	258	638
13	116	275	e92	178	e150	1650	764	1680	2950	358	262	582
14	114	272	e80	174	222	906	697	1690	2960	344	292	295
15	116	273	e80	153	212	777	535	1690	3070	331	259	241
16	119	268	e80	169	184	2860	437	1670	3140	327	246	244
17	115	267	e80	161	188	2220	392	1640	3200	320	244	259
18	119	267	e80	125	216	965	366	1610	3290	307	242	883
19	118	265	e80	125	169	766	350	1570	3330	288	240	2640
20	120	205	e76	174	199	671	350	1320	3620	276	238	2070
21	124	156	e73	166	207	615	719	1180	4130	262	233	1020
22	122	143	e74	148	177	579	648	1190	3810	256	227	1210
23	121	135	e76	138	229	556	1130	1130	3220	255	224	1160
24	129	131	e76	155	2290	528	2320	812	3100	260	388	1080
25	186	129	e76	143	5300	508	1290	719	2910	257	1400	1060
26 27 28 29 30 31	213 185 183 203 177 158	128 128 127 125 125	e74 e76 e80 e80 e76 e74	167 130 168 164 e150 e140	3130 1610 850 	493 480 447 387 370 367	1170 1080 1030 998 967	628 557 545 547 836 1090	2620 2190 1630 1080 873	267 343 662 949 1020 1260	1210 632 403 327 355 382	1050 1030 875 751 729
MEAN	135	210	94.0	139	590	761	670	1208	2541	492	408	784
MAX	213	278	125	178	5300	2860	2320	1800	4130	1260	1400	2640
MIN	114	125	73	70	81	367	329	545	873	255	224	241
AC-FT	8280	12490	5780	8530	32760	46780	39880	74270	151200	30250	25060	46640

06870200 SMOKY HILL RIVER AT NEW CAMBRIA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	508 6168 1974 23.2 1992	408 3087 1974 43.1 1992	369 3293 1974 40.8 1992	285 2071 1994 40.0 1992	449 2850 1993 35.8 1992	704 4789 1973 40.6 1992	871 6506 1973 47.2 1992	1076 5331 1995 47.6 1992	1159 5360 1995 117 1988	1046 12190 1993 52.5 1968	733 5796 1993 51.7 1991	629 4601 1993 57.9 1991
SUMMARY	STATISTI	CS	FOR 2	2000 CALE	NDAR YEAR	FC	OR 2001 W	NATER YEAR		WATER YE	ARS 1963	- 2001
SUMMARY STATISTICS ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN				487			666			687 3609 117		1993 1989
HIGHEST	DAILY ME	EAN		9570	Mar 25		5300	Feb 25		25000	Oct 1	L2 1973
	DAILY MEA			73	Dec 21		70	Jan 1		13		L8 1991
		MINIMUM		75	Dec 20		75	Dec 20		14		L8 1991
	PEAK FLO						6130	Feb 25		26400		L2 1973
	PEAK STA						21.1 70			31.72 11		25 1993 22 1991
	RUNOFF (A			353400			481900	Jan 1		497800	OCL 2	22 1991
	ENT EXCEE	- ,		851			1670			1860		
	ENT EXCEE			277			331			226		
90 PERC	ENT EXCEE	EDS		120			112			71		



06870300 GYPSUM CREEK NEAR GYPSUM, KS

LOCATION.--Lat $38^\circ 39^\circ 11^\circ$, long $97^\circ 25^\circ 10^\circ$, in SE $^{1}/_{4}$ SE $^{1}/_{4}$ SW $^{1}/_{4}$ sec.15, T.16 S., R.1 W., Saline County, Hydrologic Unit 10260008, on left bank at downstream side of highway bridge, 2.6 mi upstream from Stag Creek, 3.5 mi south of Gypsum, and at mile 22.7. 2@ Gypsum Creek near Gypsum 2@ Gypsum Creek near

DRAINAGE AREA. -- 117 mi².

PERIOD OF RECORD.--October 1954 to September 1971. October 1971 to September 1990, flood hydrograph record. May 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,232.16 ft above sea level. Prior to July 21, 1959, nonrecording and crest-stage gages at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s June 26, 1965, (gage height 20.71 ft). Maximum stage known since at least 1869, 22.2 ft May 29, 1903; flood in April 1929 reached a swtage of 21.9 ft, and that of July 11, 1951, a stage of 21.7 ft, from floodmark; information from newspapers and local residents.

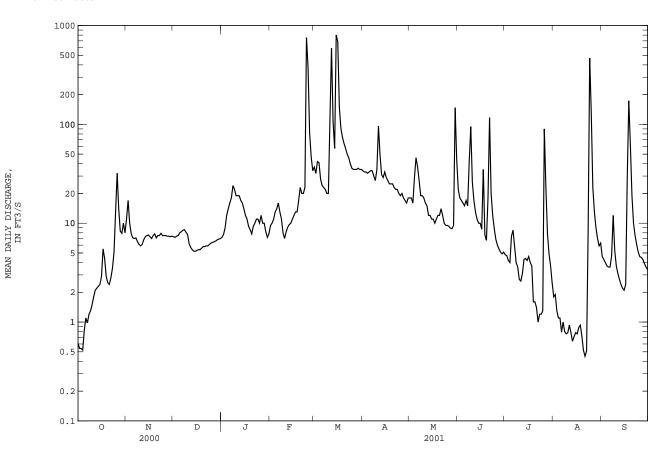
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 650 ft^3/s and maximum (*):

Date	Tin	ne	Discharge (ft ³ /s)	e Gag	ge height (ft)		Date	Time	e	Discharge (ft ³ /s)		height (ft)
Feb 24 Mar 12			1,130 997		15.98 15.13		Mar 15 Aug 24	221 191		*1,970 1,000		7.65 5.16
		DISCHA	RGE, CUBI	C FEET PI	ER SECOND, DAIL	WATER YEA Y MEAN VAL		2000 TO	SEPTEMBI	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.61 .54 .54 .52	11 17 10 7.8 7.1	7.3 7.2 e7.4 7.5 e8.0	e7.2 e7.7 e9.0 e12 e14	e9.5 e10 e11 e13 e14	37 32 42 41 28	34 33 33 32 33	18 18 16 29 46	22 18 17 16 15	4.8 4.7 4.2 4.0 7.4	1.8 1.9 1.3 1.1	4.6 4.3 4.0 3.7 3.6
6 7 8 9 10	1.1 .98 1.2 1.3 1.5	7.0 7.1 6.5 6.1 5.9	8.2 8.5 8.6 8.1 e7.7	e16 e18 24 22 19	e16 e13 e11 e8.0 e7.0	24 23 22 20 20	34 34 30 27 35	37 27 19 19	17 15 42 95 26	8.5 5.8 4.0 3.6 2.7	.79 1.0 .80 .76 .78	3.6 4.7 12 5.3 3.7
11 12 13 14 15	1.8 2.1 2.2 2.3 2.4	6.1 6.8 e7.3 e7.5 7.6	e6.2 e5.7 e5.4 e5.2 e5.2	19 19 17 16 14	e8.2 e9.1 e9.7 e10 e11	114 589 106 57 802	96 49 31 29 33	16 15 12 12	17 13 11 10 10	2.6 3.1 4.3 4.4 4.2	.93 .78 .64 .71 .78	3.1 2.7 2.4 2.2 2.1
16 17 18 19 20	2.9 5.5 4.4 2.9 2.5	7.3 e7.0 e7.5 7.8 7.1	e5.3 e5.4 e5.4 e5.6 e5.8	12 11 e9.3 e8.6 e7.8	e12 e13 e13 17 23	686 149 91 74 64	29 27 25 25 25	11 10 11 12 12	8.7 35 7.6 6.7	4.6 4.0 3.7 1.6 1.6	.76 .88 .93 .72 .52	2.4 29 173 61 19
21 22 23 24 25	2.4 2.8 3.5 5.1	e7.5 e7.5 7.9 7.5 7.5	e5.8 e5.9 e5.9 e6.1 e6.3	9.3 10 11 11 10	20 20 23 757 378	57 50 46 40 36	23 22 22 20 19	14 12 10 9.5 9.5	117 20 12 8.8 6.9	1.4 1.0 1.2 1.2	.45 .51 8.1 469 131	10 7.5 6.1 5.1 4.6
26 27 28 29 30 31	32 14 8.3 7.9 10 8.0	7.5 7.4 7.4 7.3 7.4	e6.4 e6.5 e6.6 e6.8 e6.9 e7.0	12 10 e10 e8.2 e7.2 e7.8	82 47 34 	35 35 35 36 35 35	20 18 17 16 18	9.3 8.9 8.8 9.5 148 44	6.0 5.5 5.1 4.9 5.1	90 23 7.9 4.9 3.7 2.5	23 13 9.0 7.0 5.9 6.3	4.5 4.3 3.9 3.6 3.4
TOTAL MEAN MAX MIN AC-FT	145.12 4.68 32 .52 288	232.4 7.75 17 5.9 461	203.9 6.58 8.6 5.2 404	389.1 12.6 24 7.2 772	1599.5 57.1 757 7.0 3170	3461 112 802 20 6860	889 29.6 96 16 1760	652.5 21.0 148 8.8 1290	611.3 20.4 117 4.9 1210	221.9 7.16 90 1.0 440	692.24 22.3 469 .45 1370	399.4 13.3 173 2.1 792

06870300 GYPSUM CREEK NEAR GYPSUM, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
MEAN MAX (WY) MIN (WY)	15.0 89.3 1968 .000 1955	8.71 30.8 1968 .000 1955	8.24 25.0 1968 .000 1956	12.3 58.9 1962 .000 1957	17.8 57.1 2001 .000 1957	31.5 123 1960 .016 1956	145 1969 .12	59.4 359 1969 1.42 1955	63.3 331 1965 .050 1956	25.0 101 1969 .000 1956	5.78 22.3 2001 .000 1955	26.2 237 1967 .000 1956		
SUMMAR	Y STATIST	ICS			FOR 20	001 WAT	ER YEAR			WATER YE	ARS 1955	- 2001		
	MEAN F ANNUAL I ANNUAL MI				2	26.0				26.1 73.3 .26		1969 1956		
	r DAILY M				80	02	Mar 15			3500		26 1965		
	DAILY ME					. 45	Aug 21			.00		1 1954		
	SEVEN-DA				1.01	.68	Aug 16			.00	0ct	1 1954 26 1965		
	M PEAK FLO				19		Mar 15							
	M PEAK STA				-	17.65 .42	Mar 15			20.71		26 1965		
INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT)						.42 Aug 21 18840					.00 at times 18920			
	CENT EXCE					±0 36				35				
	CENT EXCE				-	8.7					7.2			
	CENT EXCE					1.6				.00				



06871000 NORTH FORK SOLOMON RIVER AT GLADE, KS

LOCATION.--Lat $39^{\circ}40^{\circ}40^{\circ}$, long $99^{\circ}18^{\circ}30^{\circ}$, in NW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.25, T.4 S., R.18 W., Phillips County, Hydrologic Unit 10260011, on left bank at downstream side of bridge on U.S. Highway 183, 0.5 mi south of Glade.

DRAINAGE AREA.--849 mi².

PERIOD OF RECORD.--October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,754.04 ft above sea level. Prior to Feb. 17, 1965, at datum 2.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

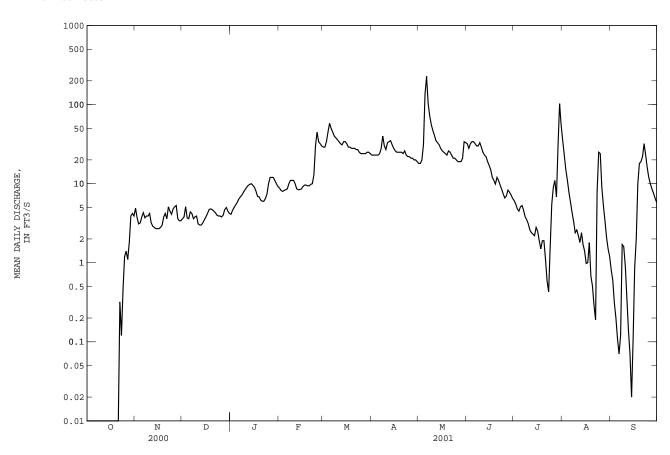
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Tin	ne	Discharge (ft ³ /s)	e Ga	ge height (ft)		Date	Time		Discharge (ft ³ /s)		height
May 6	060	00	*276		*5.41		No peak	greater	than bas	e discharg	je.	
		DISCHA	RGE, CUBIC	C FEET P		WATER YEA Y MEAN VAI	AR OCTOBER LUES	2000 то	SEPTEMBE	R 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	e4.9 3.7 3.1 3.2 3.8	3.6 3.8 5.1 3.7 3.6	e4.1 e4.6 e5.0 e5.4 e5.8	e8.8 e8.2 e8.0 e8.2 e8.4	e29 e29 e34 e45 e58	23 23 23 23 23	18 18 20 31 135	32 28 32 34 34	6.1 5.5 4.8 4.5 5.1	35 23 15 11 7.7	.81 .60 .31 .20
6 7 8 9 10	.00 .00 .00 .00	4.3 3.7 3.9 3.9 4.2	4.4 4.2 3.6 3.8 3.9	e6.4 e6.8 e7.2 e7.8 e8.4	e8.6 e10 e11 e11 e11	e50 e45 e40 e38 e36	24 28 40 30 27	228 103 72 56 47	32 30 30 33 29	5.3 4.6 3.8 3.5 3.1	5.8 4.3 3.3 2.4 2.6	.07 .12 1.7 1.6 .91
11 12 13 14 15	.00 .00 .00 .00	3.2 e2.9 e2.8 e2.7 e2.7	3.1 e3.0 e3.0 e3.2 e3.5	e9.0 e9.5 e9.8 e10 e9.5	e10 e8.6 e8.4 e8.4 e8.6	e34 e32 31 34 34	33 34 35 31 28	41 35 33 31 28	25 23 22 19 17	2.6 2.4 2.3 2.2 2.8	2.2 1.8 2.4 1.7	.36 .14 .07 .02
16 17 18 19 20	.00 .00 .00 .00	e2.7 e2.8 3.0 3.8 4.2	e3.8 e4.2 e4.7 e4.8 e4.7	e9.0 e8.0 e6.9 e6.8 e6.2	e9.2 e9.6 e9.6 e9.4 e9.4	32 e29 e29 28 28	26 25 25 25 25	26 25 24 23 26	15 12 11 9.9	2.5 1.9 1.5 1.9	.98 1.0 1.8 .68	.87 2.0 10 18 19
21 22 23 24 25	.01 .32 .12 .46	3.6 5.1 4.5 4.1 4.8	e4.5 e4.3 e4.0 e3.9 e3.9	e6.0 e6.0 e6.5 e7.4 e10	e9.8 e10 e13 e30 e45	28 27 27 25 24	24 26 23 22 22	25 23 21 21 20	11 9.6 8.5 7.4 6.6	1.1 .59 .43 1.6 5.5	.29 .19 8.1 25 24	22 32 23 16 12
26 27 28 29 30 31	1.4 1.1 1.8 e3.9 e4.2 e3.9	5.1 5.3 3.6 3.4 3.4	e3.8 e4.0 e4.7 e5.0 e4.5 e4.2	e12 e12 e12 e11 e10 e9.2	e34 e32 e30 	24 24 24 25 25 24	21 21 20 20 19	19 19 19 21 34 33	7.0 8.3 7.8 7.2 6.5	9.0 11 6.8 30 103 55	9.0 5.3 3.4 2.1 1.5	10 8.6 7.6 6.6 5.8
MEAN MAX MIN AC-FT	.59 4.2 .00 37	3.75 5.3 2.7 223	4.02 5.1 3.0 247	8.01 12 4.1 493	13.9 45 8.0 770	32.0 58 24 1970	25.6 40 19 1530	41.1 228 18 2530	18.7 34 6.5 1110	9.43 103 .43 580	6.60 35 .19 406	6.69 32 .02 398

06871000 NORTH FORK SOLOMON RIVER AT GLADE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	13.3 318 1966 .000 1959	8.97 60.6 1994 .000 1965	9.10 59.5 1994 .000 1956	10.4 66.8 1994 .000 1957	18.6 105 1966 .000 1957	28.2 250 1960 .000 1981	25.4 98.7 1987 .000 1981	54.8 512 1995 .94 1992	71.5 1011 1957 .28 1991	40.9 182 1957 .000 1980	31.5 315 1968 .000 1956	17.8 249 1965 .000 1956
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	AR YEAR	FC	OR 2001 WAT	TER YE	AR	WATER YEA	ARS 1953	- 2001
	MEAN FANNUAL M ANNUAL MI			13.2			14.2			27.6 124 1.26		1957 1991
HIGHEST	C DAILY M	EAN		68	Jul 23		228	May	6	10900	Jun	16 1957
	DAILY MEA			.00	Aug 17		.00	Oct	1	.00		25 1953
	SEVEN-DAY			.00	Aug 21		.00	Oct	1	.00		25 1953
	4 PEAK FLO						276	May	6	23300		16 1957
	4 PEAK STA						5.41	May	6	18.55		16 1957
	CANEOUS LO						.00	Oct	1	.00	а	t times
ANNUAL	RUNOFF (A	AC-FT)		9570			10280			19980		
10 PERC	CENT EXCE	EDS		31			32			47		
50 PERC	CENT EXCE	EDS		6.2			7.8			8.4		
90 PERC	CENT EXCE	EDS		.00			.45			.00		



06871500 BOW CREEK NEAR STOCKTON, KS

LOCATION.--Lat $39^\circ33^\circ46^\circ$, long $99^\circ17^\circ04^\circ$, in SW $^1/_4$ NW $^1/_4$ sec.1, T.6 S., R.18 W., Rooks County, Hydrologic Unit 10260011, on left bank at downstream side of bridge on U.S. Highway 183, 8.5 mi north of Stockton.

DRAINAGE AREA.--341 mi².

PERIOD OF RECORD. -- November 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,801.80 ft above sea level. Prior to June 28, 1951, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of $600~{\rm ft}^3/{\rm s}$ and maximum (*):

Date	Time	e	Discharge (ft ³ /s)	Gag	ge height (ft)		Date	Time	I	Discharge (ft ³ /s)		height ft)
Aug 10	080	0	*182		*5.55		No peak	greater	than base	e discharge	∍.	
		DISCHA	RGE, CUBIC	FEET PI		WATER YEAI Y MEAN VALU		2000 TO	SEPTEMBER	R 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.52 .51 .50 .56	3.1 3.1 2.9 2.9 3.3	4.1 3.8 4.2 3.8 4.3	e4.2 e3.8 e3.8 e4.1 e4.4	7.0 e6.9 e6.8 6.7 6.8	e36 e34 32 17 38	12 11 11 12 12	10 9.7 9.5 16 50	13 12 12 13 12	5.8 5.7 5.4 5.3 6.2	4.9 3.8 3.1 2.4 2.0	1.5 1.5 1.9 1.7
6 7 8 9 10	.93 .94 .94 1.0	3.9 3.8 3.5 3.5 3.5	4.2 4.5 4.3 4.2 5.0	e4.7 e5.2 e5.8 e7.2 e11	7.1 7.1 8.4 e7.8 e7.2	34 29 28 24 19	12 11 11 11 11	33 37 29 26 20	12 11 36 41 17	5.7 4.9 4.7 4.4 4.0	1.9 1.8 1.7 1.7	1.5 2.7 3.1 3.1 2.6
11 12 13 14 15	1.2 1.2 1.2 1.3	3.7 e3.5 e3.4 3.2 e3.4	4.2 e3.4 e3.0 e3.2 e3.6	20 10 6.9 8.3	e6.0 e6.8 e8.0 e8.2 e7.0	18 15 15 15 15	17 16 13 13	17 17 15 14 14	14 13 11 12 11	3.9 3.9 4.0 3.9 4.5	2.3 2.4 2.4 1.7 1.6	2.2 2.0 1.9 1.7 2.1
16 17 18 19 20	1.3 1.3 1.4 1.4	e3.5 e3.4 e3.4 3.5 4.1	e3.5 e3.4 e3.5 e3.4 e3.7	10 9.3 6.2 6.9 6.8	e5.8 e5.5 e5.3 e5.8 e6.3	14 13 13 12 12	12 11 11 11 11	13 13 13 13	10 9.8 9.2 8.5 8.7	4.3 3.7 3.3 3.8 3.2	1.4 2.1 1.7 1.2 1.3	3.0 3.6 4.8 4.8 4.9
21 22 23 24 25	1.4 1.9 2.0 3.4 2.8	6.3 5.7 4.5 4.8 4.2	e3.3 e3.2 e3.4 e3.7 e3.6	e7.2 7.7 10 8.0 11	e8.0 e10 e12 e16 e20	12 12 11 11 12	11 13 12 11 11	14 13 13 12 12	8.8 8.6 8.4 7.9 7.0	2.6 2.2 2.1 2.6 7.8	1.1 1.1 13 17 5.4	4.3 3.8 3.4 3.5 3.5
26 27 28 29 30 31	2.5 2.6 3.3 4.1 3.0 2.7	3.7 3.6 3.9 3.8 3.6	e3.9 e3.6 e4.3 e4.2 e4.0 e4.3	7.1 11 9.8 9.6 6.8 6.5	e25 31 38 	11 12 12 12 12 12	11 11 12 11 10	12 12 12 15 39 19	6.7 6.5 6.4 6.1 6.0	17 9.2 7.5 7.0 6.3 5.4	4.5 4.1 2.7 2.7 3.0 1.8	3.5 3.5 3.5 3.3 3.2
MEAN MAX MIN AC-FT	1.63 4.1 .50 100	3.76 6.3 2.9 224	3.83 5.0 3.0 236	7.88 20 3.8 485	10.6 38 5.3 588	18.1 38 11 1110	11.8 17 10 702	17.9 50 9.5 1100	12.0 41 6.0 711	5.17 17 2.1 318	4.12 30 1.1 253	2.92 4.9 1.5 174

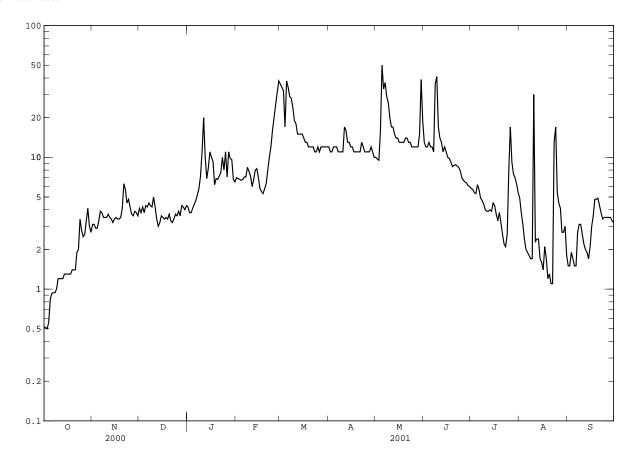
06871500 BOW CREEK NEAR STOCKTON, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	7.53 98.5 1966 .000 1957	5.53 25.8 1994 .000 1957	5.49 22.7 1994 .000 1957	5.91 22.0 1994 .000 1957	9.78 57.6 1966 .22 1957	12.5 91.2 1960 1.68 1957	12.7 68.8 1987 3.98 1982	27.8 247 1995 2.41 1955	31.2 321 1957 .37 1991	22.5 300 1993 .000 1991	14.1 145 1968 .000 1964	8.27 66.6 1965 .000 1956
SUMMARY	Y STATIST	ICS	FOR 2	2000 CALENI	DAR YEAR	F	DR 2001 WA	TER YEAR		WATER YE	ARS 1952	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUN	F ANNUAL M ANNUAL M F DAILY M DAILY ME	EAN EAN AN Y MINIMUM OW		6.08 23 .14 .19			8.30 50 .50 .69 182 5.55	May 5 Oct 3 Oct 1 Aug 10		13.6 45.5 1.73 3810 .00 .00 12900	Sep 1 Sep 1 Jul 1	1993 1981 27 1995 15 1953 15 1953 12 1951
INSTANT	TANEOUS LO	OW FLOW		4410			.35			.00 9870		times
50 PERC	CENT EXCE CENT EXCE CENT EXCE	EDS		12 4.7 .67			15 5.8 1.7			18 5.6 .49		

e Estimated

MEAN DAILY DISCHARGE, IN FT3/S



06871700 KIRWIN RESERVOIR AT KIRWIN, KS

LOCATION.--Lat 39°39'49", long 99°07'29", in SE $^1/_4$ NE $^1/_4$ sec.33, T.4 S., R.16 W., Phillips County, Hydrologic Unit 10260011, in control house structure at outlet works of Kirwin Dam on North Fork Solomon River, 0.5 mi south of Kirwin, 1.6 mi upstream from Deer Creek, and at mile 67.8.

DRAINAGE AREA. -- 1,367 mi².

PERIOD OF RECORD. -- September 1955 to current year. Monthly records only prior to October 1956.

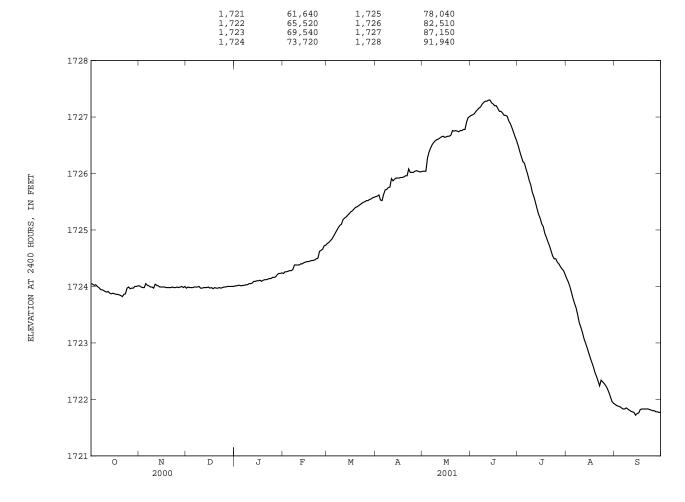
GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Bureau of Reclamation). Prior to Aug. 7, 1957, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Sept. 19, 1955. Total capacity, 512,000 acre-ft, consisting of the following: Dead storage, 6,400 acre-ft below elevation 1,693.0 ft, sill of trashrack structure; irrigation pool, 93,300 acre-ft between elevations 1,693.0 ft and 1,729.3 ft; flood-control pool, 214,900 acre-ft between elevations 1,729.3 ft and 1,757.3 ft, crest of uncontrolled spillway; and uncontrolled storage 198,400 acre-ft between elevations 1,757.3 ft and 1,773.0 ft. Reservoir is used to store water for flood control and irrigation of 11,500 acres in Kirwin Unit, Missouri River Basin project. Figures given herein represent total contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,737.06 ft June 1-3, 1995, contents, 144,600 acre-ft; minimum elevation since first filling of irrigation pool, 1,695.46 ft Feb. 10-14, 1981, contents, 8,330 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,727.31 June 13, contents, 88,620 acre-ft; minimum elevation, 1,721.72 ft Sept. 14, contents, 64,410 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet) (Based on survey made in May 1996 by Bureau of Reclamation)



06871700 KIRWIN RESERVOIR AT KIRWIN, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5		1723.98	1723.97 1723.99 1723.98 1723.98 1723.98	1724.01 1724.02 1724.02	1724.27	1724.76 1724.78 1724.81 1724.84 1724.89		1726.04 1726.04 1726.04 1726.27 1726.38	1727.06		1724.14 1724.08 1724.00 1723.90 1723.79	1721.91 1721.89 1721.88 1721.87 1721.85
6 7 8 9 10	1723.94 1723.93	1724.02 1724.01 1723.99 1723.99 1723.97	1724.00	1724.02 1724.02 1724.03 1724.03 1724.05		1724.94 1724.99 1725.04 1725.08 1725.10	1725.63 1725.71 1725.72 1725.75 1725.76	1726.45 1726.51 1726.55 1726.58 1726.60		1726.08 1725.99 1725.88 1725.80 1725.67	1723.70 1723.62 1723.50 1723.36 1723.28	1721.83 1721.83 1721.85 1721.83 1721.81
11 12 13 14 15	1723.88	1724.01 1723.99	1723.98 1723.98	1724.05 1724.06 1724.09 1724.09 1724.10	1724.38 1724.40 1724.40 1724.42 1724.43	1725.18 1725.21 1725.23 1725.26 1725.29	1725.91 1725.87 1725.90 1725.92 1725.92	1726.61 1726.63 1726.65 1726.66 1726.64		1725.59 1725.49 1725.38 1725.28 1725.21	1723.19 1723.08 1723.00 1722.92 1722.83	1721.79 1721.78 1721.77 1721.72 1721.75
16 17 18 19 20	1723.85		1723.97 1723.98 1723.96 1723.98 1723.97	1724.10 1724.11 1724.09 1724.11 1724.12	1724.44 1724.44 1724.45 1724.46 1724.46	1725.32 1725.34 1725.37 1725.40 1725.41	1725.92 1725.93 1725.93 1725.94 1725.96	1726.65 1726.66 1726.66 1726.68 1726.76	1727.20 1727.20 1727.15 1727.10 1727.10	1725.11 1725.06 1724.94 1724.87 1724.79	1722.74 1722.66 1722.58 1722.48 1722.41	1721.82 1721.83
21 22 23 24 25	1723.87 1723.97		1723.97 1723.98 1723.97 1723.98 1723.99	1724.12 1724.13 1724.14 1724.14 1724.16	1724.47 1724.49 1724.50 1724.62 1724.64	1725.43 1725.45 1725.47 1725.49 1725.50	1725.96 1726.08 1726.02 1726.02 1726.02	1726.75 1726.76 1726.75 1726.74 1726.76	1727.07 1727.03 1727.03 1727.01 1726.93	1724.72 1724.63 1724.54 1724.49 1724.49	1722.33 1722.24 1722.34 1722.31 1722.28	
26 27 28 29 30 31	1723.97 1724.00	1723.98 1723.99 1724.00 1723.98 1724.00	1724.00 1724.00 1724.00	1724.21 1724.23 1724.23			1726.04 1726.05 1726.04 1726.03 1726.03	1726.78 1726.91		1724.35 1724.31 1724.28		1721.78
MEAN MAX MIN (+) (#)	1724.05	1723.99 1724.05 1723.97 73,720 -40	1724.00		1724.43 1724.73 1724.23 76,860 +2,120	1725.25 1725.58 1724.76 80,610 +3,750	1725.86 1726.08 1725.52 82,650 +2,040	1726.61 1727.01 1726.04 87,190 +4,540	1727.30	1725.21 1726.49 1724.21 74,610 -10,570	1722.88 1724.14 1721.93 65,240 -9,370	

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

06871800 NORTH FORK SOLOMON RIVER AT KIRWIN, KS

LOCATION.--Lat $39^{\circ}39'36"$, long $99^{\circ}06'55"$, in two channels, in SE $^{1}/_{4}$ sec.33 (river outlet gage on right bank) and SW $^{1}/_{4}$ sec.34 (spillway gage on left bank), T.4 S., R.16 W., Phillips County, Hydrologic Unit 10260012, 200 ft and 600 ft, respectively, downstream from toe of Kirwin Dam, 0.5 mi and 0.8 mi, respectively, south of Kirwin, 1.3 mi upstream from Deer Creek, and at mile 67.2.

DRAINAGE AREA. -- 1,367 mi².

PERIOD OF RECORD. -- August 1919 to June 1925, August 1928 to June 1932, December 1941 to current year.

REVISED RECORDS.--WSP 1210: 1919(M). WSP 1440: 1919, 1929, 1931(M), 1942(P), 1944-47, 1948(M), drainage area (present and former sites).

GAGE.--Water-stage recorder and concrete control on river outlet channel. Datum of river outlet gage is 1,659.50 ft above sea level (Bureau of Reclamation bench mark). Water-stage recorder on spillway channel. Datum of spillway channel gage is 1,650.81 ft above sea level (Bureau of Reclamation bench mark). See WSP 1919 for history of changes prior to Jan. 30, 1957.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow completely regulated since 1955 by Kirwin Reservoir (station 06871700), 0.6 mi upstream. Figures of flow do not include diversion immediately upstream from station into Kirwin Main Canal. Separate records are collected and computed for a river outlet channel and for a spillway channel. Figures given herein represent combined discharge.

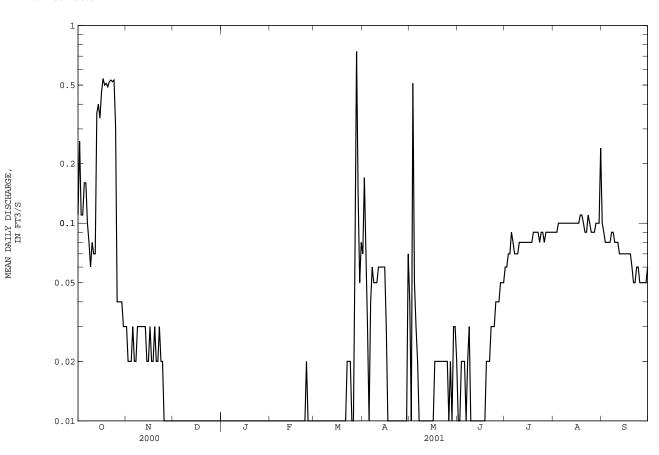
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1915 reached a stage of about 27 ft, site and datum in use prior to July 1955, from information by local residents.

		DISCHAR	GE, CUBIC	FEET PER		WATER YEA	R OCTOBER UES	2000 TO	SEPTEMBER	2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.11 .26 .11 .11	.03 .02 .02 .02 .03	.01 .01 .01 .01	e.01 e.01 e.01 e.01 e.01	.00 .00 .00 .00	.00 .00 .00 .00	.07 .17 .07 .03	.04 .00 .51 .05	.01 .01 .02 .02	.06 .06 .07 .07	.09 .09 .09 .10	.10 .09 .08 .08
6 7 8 9 10	.16 .10 .08 .06	.02 .02 .03 .03	.01 e.01 e.01 .01	e.01 e.01 e.01 .01	.00 .00 .00 .00	.00 .00 .00 .00	.04 .06 .05 .05	.02 .01 .01 .01	.01 .02 .03 .01	.08 .07 .07 .07	.10 .10 .10 .10	.08 .09 .09 .08
11 12 13 14 15	.07 .07 .36 .40	.03 .03 .03 .02	e.01 e.01 e.01 e.01 e.01	.01 .01 .01 .01	.00 .00 .00 .00	.00 .00 .00 .00	.06 .06 .06 .06	.01 .01 .01 .01	.01 .01 .00 .01	.08 .08 .08 .08	.10 .10 .10 .10	.08 .07 .07 .07
16 17 18 19 20	.46 .54 .50 .51	.03 .02 .02 .03	e.01 e.01 e.01 e.01 e.01	.01 .00 .01 .00	.00 .00 .00 .01	.00 .00 .00 .00	.03 .00 .00 .00	.01 .02 .02 .02	.01 .01 .01 .02	.08 .08 .08 .09	.10 .10 .11 .11	.07 .07 .07 .07 .06
21 22 23 24 25	.52 .53 .52 .53	.02 .03 .02 .02	e.01 e.01 e.01 e.01	.00 .00 .00 .00	.00 .00 .00 .02	.00 .02 .02 .02 .01	.00 .00 .00 .00	.02 .02 .02 .02 .02	.02 .03 .03 .03	.09 .09 .08 .09	.09 .09 .11 .10	.05 .05 .06 .06
26 27 28 29 30 31	.04 .04 .04 .04 .03	.01 .01 .01 .01	e.01 e.01 e.01 e.01 e.01	.00 .00 .00 .00	.00 .00 .00 	.01 .07 .74 .14 .05	.00 .00 .00 .00 .07	.01 .02 .01 .03 .03	.04 .04 .05 .05	.08 .09 .09 .09 .09	.09 .09 .10 .10 .10	.05 .05 .05 .05 .06
MEAN MAX MIN AC-FT	.25 .54 .03 15	.022 .03 .01 1.3	.010 .01 .01 .6	.005 .01 .00	.001 .02 .00 .06	.037 .74 .00 2.3	.033 .17 .00 2.0	.034 .51 .00 2.1	.022 .05 .00 1.3	.081 .09 .06 5.0	.10 .24 .09 6.3	.069 .10 .05 4.1

06871800 NORTH FORK SOLOMON RIVER AT KIRWIN, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	22.9 467 1947 .000 1983	13.6 124 1966 .000 1956	10.9 106 1994 .000 1956	12.4 217 1994 .000 1956	19.6 221 1994 .000 1956	19.0 215 1994 .000 1956	28.5 195 1944 .000 1985	44.6 378 1954 .000 1957	96.9 1393 1951 .000 1979	77.3 1809 1951 .000 1981	43.0 1036 1950 .000 1985	20.3 525 1951 .000 1984
SUMMARY	Y STATIST	ICS	FOR 2	2000 CALENI	DAR YEAR	FC	OR 2001 WA	TER YEAR		WATER YEA	RS 1920	- 2001
LOWEST	ANNUAL M	EAN		.07			.05			32.9 385 .000		1951 1985
LOWEST	DAILY ME DAILY ME SEVEN-DA			2.8 .00 .00	Aug 25 Feb 10 Feb 10		.74 .00 .00) Jan 15		12000 .00 .00	Jul	.2 1951 6 1924 .7 1943
MAXIMUN	M PEAK FLO M PEAK ST MANEOUS LO	AGE					24 3.18 .00			24000 22.50 .00	Sep 1	8 1919 8 1919 times
ANNUAL 10 PERG	RUNOFF (AC-FT) EDS		55 .13			40)		23820 55		
	CENT EXCE			.04			.02			.10 .00		



06872500 NORTH FORK SOLOMON RIVER AT PORTIS, KS

LOCATION.--Lat 39°33'15", long 98°41'31", in SW $^{1}/_{4}$ SW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.5, T.6 S., R.12 W., Osborne County, Hydrologic Unit 10260012, on left bank at downstream side of bridge on U.S. Highway 281, 0.5 mi south of Portis, and at mile 27.0.

DRAINAGE AREA. -- 2,315 mi², approximately.

PERIOD OF RECORD.--September 1945 to current year. Prior to Oct. 1, 1964, published as "near Downs."

GAGE.--Water-stage recorder. Datum of gage is 1,490.71 ft above sea level. Prior to Dec. 5, 1946, nonrecording gage and Dec. 5, 1946, to Sept. 30, 1964, water-stage recorder at site 9.0 mi downstream at datum 30.39 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow partially regulated since 1955 by Kirwin Reservoir (station 06871700), 40.8 mi upstream. Natural flow also affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

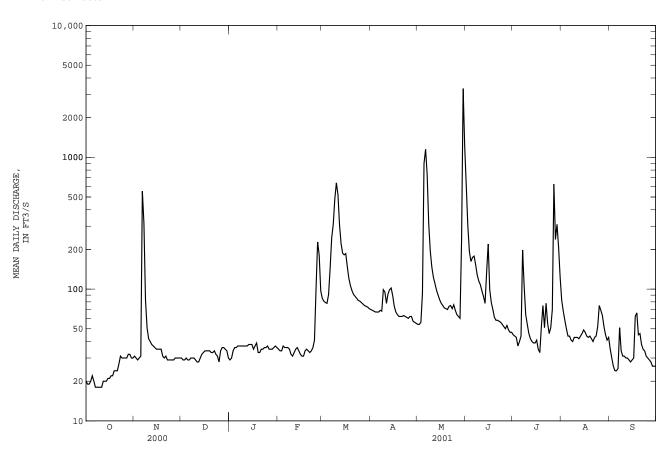
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 15, 1915, reached a stage about 1.0 ft higher than that of July 12, 1951, from information by Kansas Highway Commission.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DATLY MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP e30 e81 e79 e34 e34 e36 e37 e37 e37 e32 e37 e37 e31 e28 12 e37 e33 e28 e37 e35 e37 e30 e36 21 29 e36 e32 e34 e35 e33 e32 35 e34 e35 e31 e37 e31 e34 e34 e39 e34 e34 e33 e35 e33 e33 e34 e33 e35 e35 e34 e34 e32 e36 e31 52 e28 e34 e36 e36 e35 73 e35 e36 e34 e30 ---MEAN 23.5 61.4 31.5 35.7 51.1 70.9 95.9 49.2 33.6 MAX MIN

06872500 NORTH FORK SOLOMON RIVER AT PORTIS, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	72.5 686 1947 .65 1957	49.1 475 1997 1.44 1957	40.3 314 1994 2.08 1957	45.7 399 1994 2.19 1957	82.6 688 1949 6.29 1957	108 1043 1993 9.53 1956	89.8 498 1987 6.81 1956	183 1416 1995 2.25 1956	318 3516 1951 10.8 1991	245 4031 1951 4.03 1991	148 2247 1950 1.39 1956	102 758 1951 .29 1956
SUMMARY	STATIST	ICS	FOR 2	2000 CALE	NDAR YEAR	F	OR 2001 WA	TER YEAR		WATER YEA	ARS 1946	- 2001
	MEAN CANNUAL M ANNUAL M			45.6			88.8			124 855 21.7		1951 1991
HIGHEST	DAILY ME	EAN		553 15	Nov 6 Jul 10		3330 18	May 30 Oct 7		32300		2 1951
MAXIMUM	PEAK FLO			16	Sep 12		19 4930	Oct 6 May 30		.07 35700	Jul 1	3 1956 2 1951
INSTANT	1 PEAK STA TANEOUS LO RUNOFF (A	OW FLOW		33110			18.92 13 64320	May 30 Dec 11		30.41 .00 89610		2 1951 times
10 PERC 50 PERC	CENT EXCE	EDS EDS		71 35			147 42			182 34		
90 PERC	CENT EXCE	EDS		18			29			11		



Gage height

06873000 SOUTH FORK SOLOMON RIVER ABOVE WEBSTER RESERVOIR, KS

LOCATION.--Lat $39^{\circ}22^{\circ}26^{\circ}$, long $99^{\circ}34^{\circ}54^{\circ}$, in SW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.8, T.8 S., R.20 W., Rooks County, Hydrologic Unit 10260013, on right bank 0.4 mi downstream from county highway bridge, 4.0 mi north of Damar, 7 mi downstream from Wild Horse Creek, and 11 mi upstream from Webster Dam.

DRAINAGE AREA. -- 1,040 mi², approximately.

PERIOD OF RECORD.--January 1945 to current year. Prior to October 1953, published as "at Webster."

REVISED RECORDS. -- WSP 1440: 1945-48, 1950.

GAGE.--Water-stage recorders. Datum of gage is 1,936.51 ft above sea level (levels by Bureau of Reclamation). Prior to May 17, 1946, nonrecording gage, May 17, 1946, to May 20, 1951, water-stage recorder, and May 21 to Sept. 30, 1951, nonrecording gage, all at site 8.0 mi downstream at datum 94.52 ft lower. Oct. 1, 1951, to May 22, 1952, nonrecording gage at bridge near Stockton, 23 mi downstream, at different datum. May 23, 1952, to May 23, 1954, water-stage recorder at site 8.0 mi downstream at datum 94.52 ft lower. Since July 30, 1980, supplementary water-stage recorder at site 0.4 mi downstream at datum 3.00 ft lower. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1908, 13.4 ft June 1908, present site and datum, discharge not determined, from information obtained from Kansas Highway Commission.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,200 ft^3/s and maximum (*):

Gage height

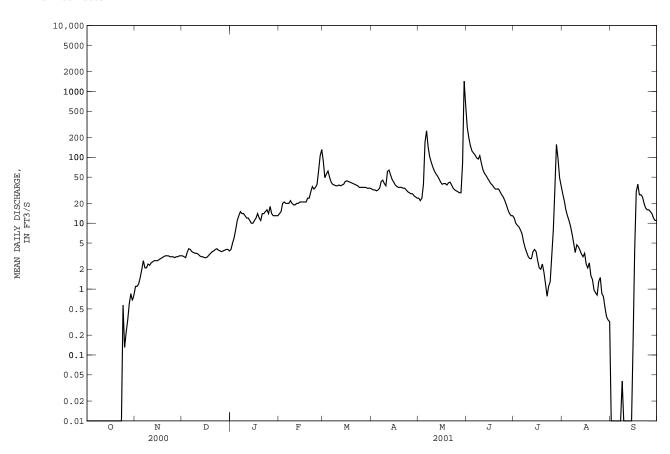
Discharge

Date	Tim	e	(ft ³ /s)	: Ga	(ft)		Date	Time	e e	(ft ³ /s)		(ft)
May 30	180	0	*2,300		*7.84		No pea	greater	than base	discharg	ge.	
		DISCHA	RGE, CUBIC	FEET P		WATER Y MEAN	YEAR OCTOBE VALUES	R 2000 TO	SEPTEMBER	2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	R APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	1.1 1.1 1.2 1.5 2.0	e3.2 e3.1 e3.0 e3.6 e4.1	e4.0 e5.0 e6.0 e8.0 e11	e14 15 20 21 20	87 49 56 62 50	32 32 32 31	24 22 24 39 170	283 198 150 125 116	12 10 9.3 8.8 7.9	28 22 16 13	.00 .00 .00 .00
6 7 8 9 10	.00 .00 .00 .00	2.7 2.1 2.1 2.4 2.3	e4.0 e3.7 e3.6 e3.5 e3.5	e13 e15 e14 e14 e13	20 20 22 e20 e19	42 39 38 37	43 3 45 7 40	252 143 102 84 71	108 98 94 106 82	6.9 5.2 4.2 3.6 3.1	9.0 6.8 5.0 3.6 4.7	.00 .00 .04 .01
11 12 13 14 15	.00 .00 .00 .00	e2.5 e2.6 e2.7 e2.7 e2.7	e3.4 e3.2 e3.1 e3.1 e3.0	e12 e12 e11 e10 e10	e19 e20 e20 e21 e21	38 37 38 39 43	64 3 54 9 46	62 56 52 47 42	65 57 53 48 44	2.9 2.9 3.7 4.0 3.7	4.4 3.9 3.4 3.1 3.5	.00 .00 .00 .00
16 17 18 19 20	.00 .00 .00 .00	e2.8 e2.9 e3.0 e3.1 e3.2	e3.0 e3.1 e3.3 e3.5 e3.7	e11 e12 e14 e12 e11	e21 e21 e21 e24 e24	44 43 42 41 40	36 2 35 35	39 40 40 38 41	40 38 35 33 33	2.7 2.1 2.0 2.4 1.8	2.4 2.1 2.5 1.6 1.4	4.0 30 39 27 27
21 22 23 24 25	.00 .00 .00 .57	e3.2 e3.2 e3.1 e3.1 e3.1	e3.8 e4.0 e4.1 e3.9 e3.8	e14 e14 e15 16 14	30 36 33 35 39	39 38 37 35	34 7 32 5 30	42 38 34 32 31	33 30 27 25 22	1.2 .78 1.1 1.3 3.2	.97 .88 .81 1.3 1.5	25 20 17 16 16
26 27 28 29 30 31	.22 .34 .60 .85 .67	e3.0 e3.1 e3.1 e3.2 e3.2	e3.7 e3.8 e3.9 e4.0 e4.0 e3.8	18 14 e13 e13 e13 e13	63 106 131 	35 35 34 34 e34	28 5 26 4 25 4 24	30 29 29 81 1430 606	19 16 14 13 13	7.9 34 157 95 49 37	.86 .77 .53 .38 .34	15 14 12 11 11
MEAN MAX MIN AC-FT	.14 .85 .00 8.3	2.60 3.2 1.1 155	3.56 4.1 3.0 219	12.1 18 4.0 744	31.3 131 14 1740	41.7 87 34 2560	7 64 4 24	122 1430 22 7480	67.3 283 13 4000	15.7 157 .78 965	5.03 28 .32 310	9.47 39 .00 564

06873000 SOUTH FORK SOLOMON RIVER ABOVE WEBSTER RESERVOIR, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG SE	lP
MEAN 35.2 16.3 MAX 1003 124 (WY) 1947 1947 MIN .000 .000 (WY) 1946 1946	15.6 17.6 84.4 77.1 1994 1994 .000 .000 1982 1982	33.2 219 1949 .023 1992	42.7 314 1960 .67 1982	46.5 174 1998 .28 1989	85.4 724 1995 .065 1989	126 1767 1951 .48 1992	124 2561 1951 .000 1966	64.0 33. 1029 38 1950 195 .000 .00 1946 194	35 51 00
SUMMARY STATISTICS	FOR 2000 CALEN	DAR YEAR	FC	OR 2001 WAS	TER YEAR		WATER YEA	RS 1946 - 200	1
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN	21.5 127	Mar 25		28.9	May 30		53.4 487 1.59 35000	195 199 Jul 12 195)1 51
LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW	.00	Aug 2 Aug 2		.00 .00 2300	Oct 1 Oct 1 May 30		.00 .00 55200	Oct 1 194 Oct 1 194 Jul 12 195	15
MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT)	15590			7.84 .00 20920			14.90 .00 38670	Jul 12 195 most year	
ANNOAL RUNOFF (AC-F1) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS	57 6.2 .00			51 13 .03			77 14 .03		



06873100 WEBSTER RESERVOIR NEAR STOCKTON, KS

LOCATION.--Lat 39°23'29", long 99°25'33", in SW $^{1}/_{4}$ NW $^{1}/_{4}$ NE $^{1}/_{4}$ sec.3, T.8 S., R.19 W., Rooks County, Hydrologic Unit 10260013, on south-east shore near Webster Dam on South Fork Solomon River, 8.0 mi west of Stockton, and at mile 92.4.

DRAINAGE AREA. -- 1,150 mi².

PERIOD OF RECORD.--June 1956 to current year. Prior to October 1956, monthly records only.

REVISED RECORDS. -- WDR KS-87-1: 1986.

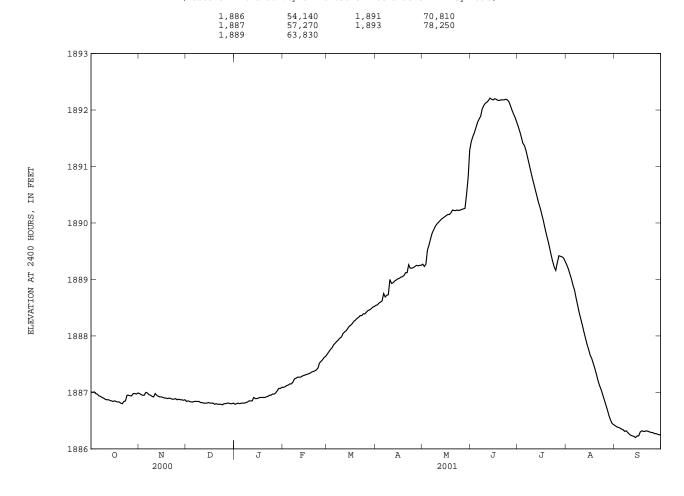
GAGE.--Water-stage recorder. Prior to July 31, 1968, elevations below 1,873 ft from mercury-column gage near south end of dam read once daily. Datum of gage is sea level (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began May 3, 1956. Total capacity, 401,600 acre-ft, consisting of the following: Dead storage, 2,184 acre-ft below elevation 1,855.5 ft, sill of trashrack; irrigation pool, 74,250 acre-ft between elevations 1,855.5 ft and 1,892.2 ft; flood-control pool, 184,300 acre-ft between elevations 1,892.2 ft and 1,923.7 ft; and uncon-trolled storage, 140,900 acre-ft between elevations 1,923.7 ft and 1,938.0 ft. Reservoir is used to store water for flood control and irrigation of approximately 8,500 acres in Webster Unit, Missouri River Basin project. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,907.03 ft June 5, 1995, contents, 144,600 acre-ft; minimum elevation since first filling of irrigation pool, 1,857.33 ft Oct. 23, 24, 1971, contents, 3,210 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,892.25 ft June 13, contents, 75,410 acre-ft; minimum elevation, 1,886.18 ft Sept. 15, contents, 54,700 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet) (Based on field survey of Bureau of Reclamation in May 1996)



06873100 WEBSTER RESERVOIR NEAR STOCKTON, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1887.01 1887.00 1887.01 1886.98 1886.97	1886.98 1886.96 1886.95 1886.95 1887.00	1886.84 1886.85 1886.84 1886.83 1886.83	1886.79 1886.80 1886.81 1886.80 1886.81	1887.09 1887.10 1887.12 1887.13 1887.15	1887.68 1887.72 1887.76 1887.79 1887.84	1888.54 1888.55 1888.58 1888.60 1888.62	1889.27 1889.23 1889.27 1889.52 1889.61	1891.44 1891.53 1891.60 1891.69 1891.78	1891.71 1891.62 1891.52 1891.41 1891.37	1889.26 1889.19 1889.10 1889.01 1888.90	1886.41 1886.39 1886.38 1886.37 1886.35
6 7 8 9 10	1886.94 1886.93 1886.91 1886.90 1886.88	1886.95 1886.93	1886.84 1886.84 1886.84 1886.84 1886.82	1886.81 1886.81 1886.82 1886.83 1886.85	1887.15 1887.18 1887.24 1887.25 1887.27	1887.87 1887.90 1887.93 1887.96 1887.98	1888.75 1888.69 1888.72 1888.73 1889.00	1889.72 1889.82 1889.88 1889.94 1889.98	1891.84 1891.89 1892.02 1892.08 1892.12	1891.28 1891.16 1891.04 1890.92 1890.80	1888.81 1888.67 1888.54 1888.41 1888.30	1886.34 1886.31 1886.32 1886.29 1886.26
11 12 13 14 15	1886.87 1886.87 1886.86 1886.85 1886.84	1886.98 1886.95 1886.93 1886.92 1886.92	1886.82 1886.81 1886.81 1886.81 1886.82	1886.85 1886.85 1886.91 1886.89 1886.89	1887.27 1887.27 1887.29 1887.30 1887.31	1888.04 1888.07 1888.09 1888.13 1888.17	1888.93 1888.94 1888.97 1888.99 1889.01	1890.01 1890.04 1890.07 1890.09 1890.11	1892.14 1892.17 1892.21 1892.19 1892.18	1890.69 1890.58 1890.47 1890.36 1890.27	1888.19 1888.07 1887.96 1887.85 1887.76	1886.24 1886.23 1886.22 1886.20 1886.23
16 17 18 19 20	1886.85 1886.84 1886.83 1886.83	1886.91 1886.90 1886.90 1886.89 1886.90	1886.81 1886.81 1886.81 1886.79 1886.80	1886.90 1886.91 1886.91 1886.91 1886.91	1887.32 1887.33 1887.34 1887.36 1887.37	1888.19 1888.22 1888.26 1888.28 1888.31	1889.02 1889.04 1889.05 1889.07 1889.12	1890.13 1890.15 1890.15 1890.18 1890.23	1892.20 1892.19 1892.17 1892.17 1892.18	1890.16 1890.05 1889.92 1889.80 1889.69	1887.66 1887.60 1887.51 1887.42 1887.32	1886.23 1886.30 1886.32 1886.31 1886.31
21 22 23 24 25	1886.80 1886.84 1886.85 1886.95 1886.95	1886.89 1886.88 1886.88 1886.89 1886.87	1886.79 1886.79 1886.79 1886.78 1886.80	1886.92 1886.93 1886.95 1886.95	1887.38 1887.40 1887.43 1887.52 1887.55	1888.33 1888.36 1888.36 1888.39 1888.39	1889.12 1889.26 1889.20 1889.20 1889.21	1890.22 1890.22 1890.23 1890.22 1890.23	1892.18 1892.18 1892.19 1892.18 1892.15	1889.57 1889.44 1889.32 1889.22 1889.16	1887.21 1887.12 1887.05 1886.96 1886.87	1886.32 1886.31 1886.30 1886.29 1886.29
26 27 28 29 30 31	1886.94 1886.98 1886.98 1886.98 1886.97 1886.99	1886.88 1886.87 1886.87 1886.86 1886.87	1886.80 1886.81 1886.81 1886.80 1886.80	1886.97 1886.99 1887.03 1887.07 1887.07	1887.58 1887.62 1887.64 	1888.42 1888.45 1888.46 1888.48 1888.51 1888.52	1889.23 1889.25 1889.24 1889.25 1889.25	1890.24 1890.25 1890.26 1890.51 1890.80 1891.29	1892.08 1892.00 1891.93 1891.87 1891.79	1889.30 1889.42 1889.41 1889.40 1889.38 1889.32	1886.78 1886.69 1886.59 1886.51 1886.45 1886.43	1886.27 1886.27 1886.26 1886.25 1886.25
MEAN MAX MIN (+) (#)	1886.91 1887.01 1886.80 57,240 -120	1886.92 1887.00 1886.86 56,860 -380	1886.81 1886.85 1886.78 56,670 -190	1886.90 1887.09 1886.79 57,560 +890	1887.32 1887.64 1887.09 59,330 +1,770	1888.16 1888.52 1887.68 62,220 +2,890	1888.97 1889.26 1888.54 64,680 +2,460	1890.06 1891.29 1889.23 71,860 +7,180	1892.01 1892.21 1891.44 73,700 +1,840	1890.25 1891.71 1889.16 64,920 -8,780	1887.75 1889.26 1886.43 55,480 -9,440	1886.29 1886.41 1886.20 54,920 -560

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

06873200 SOUTH FORK SOLOMON RIVER BELOW WEBSTER RESERVOIR, KS

LOCATION.--Lat $39^{\circ}24'34"$, long $99^{\circ}24'53"$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.26, T.7 S., R.19 W., Rooks County, Hydrologic Unit 10260014, on right bank 0.4 mi downstream from Webster Dam, 1.1 mi upstream from Sand Creek, 8 mi west of Stockton, and at mile 92.0.

DRAINAGE AREA. -- 1,150 mi².

MIN

AC-FT

.00

.04

.00

1.6

.00

.00

.00

.00

.00

.00

PERIOD OF RECORD. -- October 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,828.50 ft above sea level (Bureau of Reclamation bench mark). Prior to Apr. 9, 1963, water-stage recorders in two channels 0.2 mi upstream at different datums.

REMARKS.--Records fair. Flow completely regulated since 1956 by Webster Reservoir (station 06873100), 0.4 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV JAN FEB MAY AUG SEP .00 .05 .00 .00 .00 .00 .00 .00 . 44 110 88 .76 .00 .00 .45 .62 .00 .00 .00 .00 .00 .00 121 103 3 .00 .00 0.0 0.0 0.0 .00 .00 0.0 .66 143 110 .48 .00 .00 .00 .00 .00 .00 .00 .81 .75 e160 110 .97 .20 .00 .00 .00 .00 .46 e150 .38 6 .27 .00 .00 .00 .00 .27 .69 .00 .00 139 137 .31 .00 .03 .00 .00 .00 .00 .00 .56 .76 154 149 .37 8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 .42 1 3 164 161 .29 .00 .85 .20 .00 .00 .00 .00 .00 .00 .17 168 162 10 .00 .00 .00 .00 .00 .00 .00 .45 158 .41 1.2 11 .00 .10 .00 .00 .00 .01 .86 .17 .17 158 148 .22 1.8 12 .00 .05 .00 .00 .00 .01 .12 .02 163 145 13 .00 .02 .00 .00 .00 .00 .14 .00 169 145 .00 .02 .00 .00 .00 .00 .06 .17 .04 170 136 2.6 15 .00 .06 .00 .00 .00 .13 .03 .13 .08 176 120 3.0 .01 .00 .07 16 .00 .00 .00 .04 .01 .06 181 107 3.8 .00 .03 .02 .10 97 93 4.6 17 .00 .01 .00 .00 .09 190 18 201 .01 .00 .00 .00 .10 .07 .00 .00 .00 .00 .00 .05 .04 .13 198 20 .00 .00 .00 .00 .00 .03 .25 .26 18 184 116 3.3 21 .00 .00 .00 .02 .71 .13 .26 133 2.0 .00 186 .00 .00 .00 .00 .39 179 167 1.2 22 .00 .00 .00 1.1 129 23 .00 .00 .85 126 .00 .00 .00 .11 28 25 .00 .00 .00 .00 .00 .00 .10 .00 149 126 .23 26 .00 .00 .00 .00 .00 .06 .00 86 27 0.0 .00 .00 0.0 0.0 .00 .04 .00 115 114 96 107 .03 28 .00 .00 .00 .00 .00 .00 83 .00 .00 .00 29 .00 .00 .00 .00 .00 .00 .42 110 83 94 .00 .00 30 0.0 00 0.0 ___ 0.0 .00 1.0 110 82 56 .00 .00 .00 .47 31 .00 .00 MEAN 001 027 000 000 000 012 16 20 19 1 150 117 1 39 .01 .27 .00 .13 1.1 1.0 115 162 5.2 MAX .00 .00 201

.00

.00

9.5

.00

82

7200

9250

.00

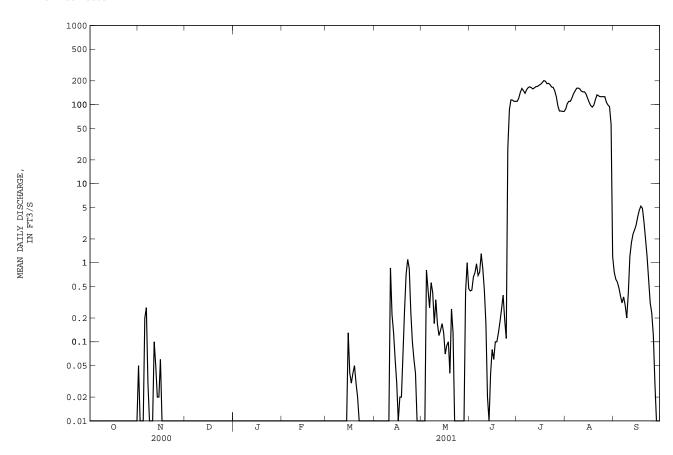
82

.00

06873200 SOUTH FORK SOLOMON RIVER BELOW WEBSTER RESERVOIR, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	6.66 115 1994 .000 1957	8.89 191 1994 .000 1957	14.0 468 1994 .000 1957	9.14 131 1994 .000 1957	17.4 201 1994 .000 1957	24.2 268 1959 .000 1957	29.6 418 1960 .000 1965	28.2 334 1960 .000 1968	69.0 731 1995 .000 1978	142 682 1995 .000 1978	81.5 433 1961 .000 1978	16.9 250 1962 .000 1972
SUMMARY	STATIST:	ICS	FOR 2	2000 CALENI	AR YEAR	F	OR 2001 WAS	TER YEAR		WATER YEA	RS 1957	- 2001
	MEAN ANNUAL M ANNUAL MI			35.2			24.4			37.5 163 .000		1995 1984
	DAILY ME			196 .00	Jun 22 Sep 7		201	Jul 18 Oct 1		1990 .00	Jul 1 Oct	10 1962 1 1956
	SEVEN-DAY	MINIMUM Y		.00	Sep 9		.00	Oct 1 Jul 18		.00 2070	Oct	1 1956 10 1962
MAXIMUM	PEAK STA	AGE					5.94					t years
ANNUAL	RUNOFF (A	AC-FT)		25520			17690	000		27170	most	. years
	CENT EXCEI			133 1.5			126 .00			128 .04		
90 PERC	CENT EXCE	EDS		.00			.00			.00		



06873460 SOUTH FORK SOLOMON RIVER AT WOODSTON, KS

LOCATION.--39°26'23", long 99°06'05", in NE $^1/_4$ SE $^1/_4$ sec.16, T.7 S., R.16 W., Rooks County, Hydrologic Unit 10260014, on left bank near upstream side of county highway bridge, 0.8 mi south of Woodston, and at mile 64.1.

DRAINAGE AREA.--1,502 mi².

PERIOD OF RECORD.--October 1978 to current year.

REVISED RECORDS.--WDR KS-82-1: 1979(M) (monthly runoff), 1980 (monthly runoff).

 ${\tt GAGE.--Water-stage}$ recorder. Datum of gage is 1,660.78 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow moderately regulated since 1956 by Webster Reservoir (station 06873100), 28.3 mi upstream, and Woodston diversion dam, 1.9 mi upstream. Natural flow also affected by ground-water withdrawals and return flow from irrigation areas. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1 2 3 4 5	.17 .15 .22 .25 .45	3.9 2.7 2.7 2.7 7.1	4.3 e4.0 e3.9 e3.9	e2.0 e2.2 2.4 3.2 4.2	5.1 4.6 6.3 6.5 6.5	e15 e20 20 20 21	12 12 12 12 13	9.7 9.0 10 21 55	136 90 69 60 75	8.8 6.2 2.6 3.7 16	36 23 13 11 8.2	39 28 21 18 15	
6 7 8 9 10	.36 .34 .35 .44	20 10 10 9.2 7.5	5.0 5.1 4.8 4.8 3.6	5.5 6.1 5.5 5.0 6.7	6.7 6.4 6.8 4.1 2.9	21 20 19 19	14 15 13 13	107 91 68 55 47	63 71 85 599 523	8.2 2.0 7.2 12 9.1	8.3 8.5 8.3 10 20	14 14 14 13 11	
11 12 13 14 15	.43 .52 .55 .43	7.5 6.9 5.2 5.1 6.2	2.5 2.2 2.3 2.3 2.5	8.2 6.5 9.1 6.9 5.1	4.4 4.7 5.3 5.4 5.3	19 18 18 18 18	24 23 10 12 15	42 38 34 31 29	233 167 127 139 131	8.3 4.5 6.2 8.0	20 12 15 21 25	9.6 8.3 7.7 6.8 6.7	
16 17 18 19 20	.54 .68 .82 1.2	6.0 4.4 4.5 6.0 5.1	2.4 2.3 2.3 2.4 2.5	4.9 4.9 4.6 4.3 4.6	4.4 4.3 4.2 5.0 6.2	17 16 16 17 16	14 13 13 13 13	26 25 24 24 36	126 97 78 68 57	11 7.1 5.3 12 12	20 16 12 5.7 3.7	8.7 11 13 11 11	
21 22 23 24 25	1.2 1.4 1.5 4.0 6.7	4.5 5.2 5.6 4.8 5.2	2.3 2.6 2.4 2.2 1.9	4.5 4.5 6.2 5.6 5.1	5.3 5.8 9.1 e8.0 e9.0	16 16 15 14 14	12 15 13 12 12	48 29 25 23 23	53 50 46 42 19	5.1 3.1 6.1 22 40	5.7 20 26 44 30	8.5 7.6 6.6 6.5 6.2	
26 27 28 29 30 31	3.1 2.3 2.6 5.2 4.4 3.4	4.9 5.1 5.2 4.7 4.5	1.9 2.1 2.1 2.2 e2.1 e2.0	7.0 3.9 4.1 5.8 8.3 7.1	e10 e9.0 e10 	16 12 13 14 13	12 12 11 10 9.7	22 22 21 32 85 194	2.7 8.5 20 21 14	59 175 187 103 65 47	27 31 25 18 21 47	5.9 5.8 5.4 4.9 4.6	
MEAN MAX MIN AC-FT	1.48 6.7 .15 91	6.08 20 2.7 362	2.94 5.1 1.9 180	5.29 9.1 2.0 325	6.12 10 2.9 340	16.9 21 12 1040	13.3 24 9.7 789	42.1 194 9.0 2590	109 599 2.7 6490	28.1 187 2.0 1730	19.1 47 3.7 1170	11.4 39 4.6 680	

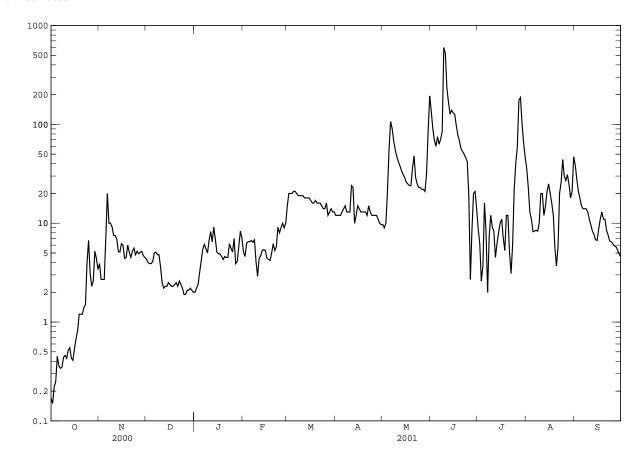
06873460 SOUTH FORK SOLOMON RIVER AT WOODSTON, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	16.8 186 1994 .006 1979	22.5 240 1994 .052 1982	33.1 541 1994 .11 1982	23.6 228 1994 .055 1982	31.4 271 1994 .62 1992	49.0 282 1994 .42 1982	72.8 663 1987 .36 1982	84.4 723 1995 .31 1982	66.1 862 1995 .10 1981	135 1742 1993 .080 1981	45.6 346 1993 .14 1981	20.1 161 1993 .10 1981
SUMMARY	STATIST:	ICS	FOR 2	2000 CALENI	DAR YEAR	FC	OR 2001 WA	TER YE	AR.	WATER YEA	ARS 1979	- 2001
	MEAN CANNUAL I ANNUAL MI			20.6			21.8			50.2 248 .59		1993 1981
LOWEST	DAILY ME			74 .15 .25	Mar 26 Oct 2 Sep 28		599 .15 .28		9 2	7260 .00 .00	Oct	21 1993 1 1978 6 1978
MAXIMUN MAXIMUN	M PEAK FLO M PEAK STA	OW AGE		.25	Бер 20		1000 10.92	Jun Jun	9	8710 22.89	Jul	21 1993 21 1993
ANNUAL	CANEOUS LO RUNOFF (A CENT EXCE	AC-FT)		14960 49			.09 15780 47	0ct	1	.00 36390 97	Oct	1 1979
50 PERC	CENT EXCE	EDS		15 .76			9.0 2.3			6.6 .44		

e Estimated

MEAN DAILY DISCHARGE, IN FT3/S



06874000 SOUTH FORK SOLOMON RIVER AT OSBORNE, KS

LOCATION.--Lat $39^{\circ}25'43"$, long $98^{\circ}41'40"$, in SW $^{1}/_{4}$ NW $^{1}/_{4}$ Sec.20, T.7 S., R.12 W., Osborne County, Hydrologic Unit 10260014, on right bank at downstream side of bridge on U.S. Highway 281, 0.5 mi south of Osborne, 0.6 mi downstream from Covert Creek, and at mile 27.6.

DRAINAGE AREA. -- 2,012 mi².

PERIOD OF RECORD. -- March 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,505.09 ft above sea level. Prior to Dec. 12, 1946, nonrecording gage at same

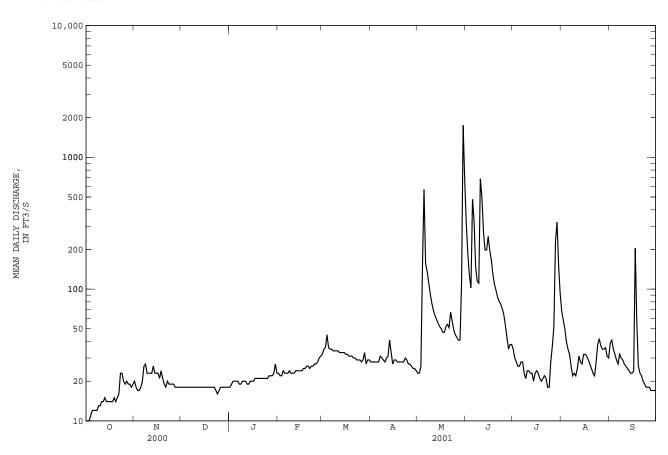
REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow moderately regulated since 1956 by Webster Reservoir (station 06873100), 64.8 mi upstream. Diversions upstream from station for irrigation. Occasional low-water regulation by Osborne city reservoir, 1.5 mi upstream. Satellite telemeter at station.

		DISCHAR	GE, CUBIC	C FEET PER		WATER YEA MEAN VAI		2000 TO	SEPTEMBE	R 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	10 10 10 11 12	20 18 17 17 18	18 18 18 18	e18 e19 e20 e20 e20	23 e22 22 24 23	e32 35 36 45 36	28 28 28 28 28	23 23 26 146 571	316 185 127 102 480	35 30 28 26 26	68 58 50 40 35	39 41 35 32 29
6 7 8 9 10	12 12 12 13 13	20 26 27 23 23	18 18 18 18	e20 e19 e19 e20 e20	23 23 24 e23 e23	35 35 34 34 34	28 31 30 29 28	157 136 112 92 78	328 147 115 111 687	28 28 23 21 24	32 26 22 23 22	27 32 30 29 27
11 12 13 14 15	14 14 15 14	23 23 26 23 23	18 e18 e18 e18 e18	e20 e19 e19 e20 e20	e23 e24 24 e24 e24	e34 e33 e33 33 33	30 31 41 33 27	69 63 59 55 52	497 272 198 198 251	24 23 23 20 23	25 31 28 27 32	26 25 24 23 23
16 17 18 19 20	14 14 14 15 14	23 21 24 21 19	e18 e18 e18 e18 e18	e20 e21 21 e21 21	e24 e25 25 26 26	32 32 31 31 31	29 29 28 28 28	50 47 47 52 54	198 167 130 109 98	24 23 21 20 21	32 31 29 27 25	24 204 55 26 23
21 22 23 24 25	15 16 23 23 20	18 20 19 19	e18 e18 e17 e16 e17	e21 e21 e21 21 21	e25 e26 26 e27 e27	30 30 29 29 29	28 28 30 29 27	51 67 57 49 45	87 81 77 71 64	22 21 18 18 28	23 22 28 38 42	22 20 19 18 18
26 27 28 29 30 31	19 20 19 19 18	19 18 18 18 18	e18 e18 e18 e18 e18	22 e22 22 23 27 23	e28 e30 e31 	28 29 33 27 29 29	27 26 25 25 24	43 41 41 112 1750 676	53 43 35 38 38	37 52 229 323 153 93	37 35 35 36 31 30	18 17 17 17 17
MEAN MAX MIN AC-FT	15.1 23 10 928	20.7 27 17 1230	17.9 18 16 1100	20.7 27 18 1270	24.8 31 22 1380	32.3 45 27 1990	28.6 41 24 1700	156 1750 23 9610	177 687 35 10520	47.9 323 18 2950	32.9 68 22 2020	31.9 204 17 1900

06874000 SOUTH FORK SOLOMON RIVER AT OSBORNE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	61.6 792 1947 .21 1957	44.3 353 1997 .36 1957	40.7 630 1994 1.05 1957	39.0 342 1994 1.22 1957	63.6 487 1949 2.70 1957	95.3 644 1993 4.77 1957	121 1437 1987 6.01 1972	157 1158 1995 7.39 1992	251 3675 1951 5.24 1981	311 5193 1951 1.74 1955	114 1666 1950 .75 1978	72.8 708 1951 .28 1956
SUMMARY	STATIST	ICS	FOR 2	2000 CALEI	NDAR YEAR	F	OR 2001 WAT	TER YEAR		WATER YEA	ARS 1947	- 2001
LOWEST	'ANNUAL M ANNUAL MI	EAN		36.9			50.5			115 994 9.27		1951 1991
LOWEST	DAILY ME	AN		100 10 11	Mar 27 Sep 19		1750 10 11	May 30 Oct 1 Oct 1		53500	Sep	12 1951 24 1984
MAXIMUM MAXIMUM	SEVEN-DA: I PEAK FLO 'ANEOUS LO	AGE		11	Sep 28		2370 15.85 10	Oct 1 May 30 May 30 Oct 1		.17 81200 28.33 .00	Jul Jul	11 1981 13 1951 21 1993 y years
ANNUAL 10 PERC	RUNOFF (A ENT EXCENTENTE	AC-FT) EDS		26810 76 24			36590 79 25	000 1		83010 202 23	man	y years
90 PERC	ENT EXCE	EDS		12			18			5.5		



06874200 WACONDA LAKE AT GLEN ELDER, KS

LOCATION.--Lat $39^{\circ}29^{\circ}46^{\circ}$, long $98^{\circ}18^{\circ}48^{\circ}$, in SW $^{1}/_{4}$ SE $^{1}/_{4}$ SW $^{1}/_{4}$ sec.27, T.6 S., R.9 W., Mitchell County, Hydrologic Unit 10260015, in outlet structure of Glen Elder Dam on Solomon River, southwest edge of Glen Elder, and at mile 172.4.

DRAINAGE AREA. -- 5,076 mi².

PERIOD OF RECORD. -- January 1969 to current year.

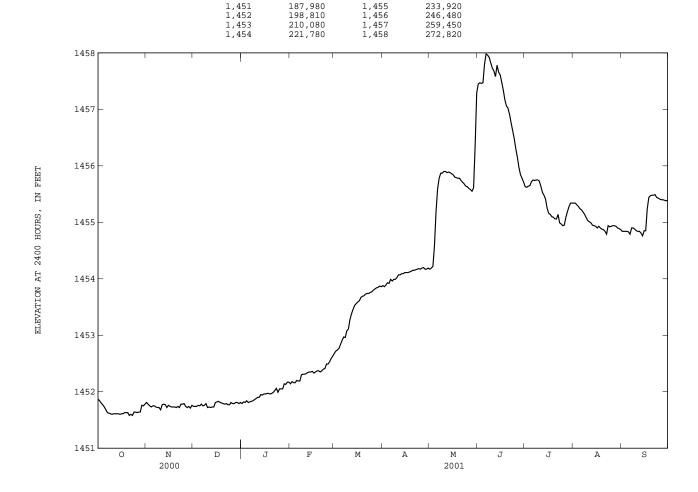
GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Bureau of Reclamation). Prior to June 4, 1969, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by compacted earthfill dam. Date of closure was Oct. 18, 1967. Regulated storage began Jan. 1, 1969. Conservation pool elevation was first reached on May 17, 1973. Total capacity, 1,128,700 acre-ft, consisting of the following: Dead storage, 1,236 acre-ft below elevation 1,407.8 ft; conservation pool, 240,200 acre-ft between elevations 1,407.8 ft and 1,455.6 ft; flood-control pool, 722,300 acre-ft between elevations 1,455.6 ft and 1,488.3 ft; and surcharge pool, 165,000 acre-ft between elevations 1,488.3 ft and 1,492.9 ft. Figures given herein represent total contents. Inflow partially regulated by Webster Reservoir (station 06873100) and Kirwin Reservoir (station 06871700). Diversions for irrigation upstream from station. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,487.01 ft July 29, 1993, contents, 921,000 acre-ft; minimum elevation since conservation pool was first reached, 1,448.90 ft Dec. 5-7, 1984, contents, 65,440 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,457.99 ft June 7, contents, 272,690 acre-ft; minimum elevation, 1,451.56 ft Oct. 24, contents, 194,050 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet) (Computed by Bureau of Reclamation on basis of resurvey made in 1995) (used Oct. 1, 1995, to present)



06874200 WACONDA LAKE AT GLEN ELDER, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1451.80 1451.77	1451.75 1451.73	1451.74 1451.74 1451.74 1451.76 1451.75	1451.81	1452.16 1452.16	1452.77	1453.88 1453.86 1453.89 1453.93 1453.92	1454.17 1454.19 1454.22 1454.58 1455.18	1457.45 1457.47 1457.46 1457.47 1457.80	1455.63 1455.62 1455.64 1455.65 1455.72		1454.84 1454.84 1454.84
6 7 8 9 10	1451.62	1451.72	1451.78 1451.75 1451.76 1451.79 1451.72	1451.84 1451.86		1452.91 1452.97 1452.96 1453.08 1453.11	1453.99 1453.96 1453.99 1453.99 1454.02	1455.59 1455.78 1455.87 1455.87 1455.90	1457.98 1457.96 1457.92 1457.82 1457.73	1455.75 1455.74 1455.75 1455.75 1455.73	1455.22 1455.18 1455.14 1455.08 1455.03	1454.79 1454.90 1454.90 1454.88 1454.85
11 12 13 14 15	1451.61	1451.77 1451.72	1451.73 1451.73	1451.95	1452.32 1452.34 1452.35 1452.35 1452.36	1453.28 1453.38 1453.46 1453.53 1453.56	1454.07 1454.07 1454.09 1454.09 1454.11	1455.90 1455.88 1455.89 1455.88 1455.86	1457.68 1457.58 1457.78 1457.66 1457.61	1455.64 1455.53 1455.48 1455.41 1455.25	1455.01 1454.99 1454.95 1454.94 1454.93	1454.84 1454.84 1454.81 1454.76 1454.85
16 17 18 19 20	1451.63 1451.63			1451.96 1451.97 1451.97 1451.96 1451.97	1452.33 1452.35 1452.37 1452.37 1452.35	1453.59 1453.61 1453.67 1453.69 1453.70	1454.11 1454.11 1454.12 1454.13 1454.15	1455.84 1455.80 1455.79 1455.78 1455.78	1457.48 1457.34 1457.17 1457.06 1457.02	1455.16 1455.14 1455.10 1455.09 1455.06	1454.90 1454.93 1454.90 1454.88 1454.87	1454.85 1455.24 1455.44 1455.47 1455.48
21 22 23 24 25	1451.58 1451.64	1451.72 1451.78 1451.78	1451.78 1451.79 1451.77 1451.77	1451.99 1452.02 1452.06 1451.99 1452.05	1452.37 1452.40 1452.41 1452.49 1452.49	1453.73 1453.74 1453.74 1453.76 1453.77	1454.15 1454.16 1454.17 1454.18 1454.17	1455.74 1455.71 1455.68 1455.64 1455.63	1456.91 1456.76 1456.62 1456.48 1456.30	1455.06 1455.14 1454.99 1454.97 1454.94	1454.84 1454.79 1454.94 1454.92 1454.93	1455.48 1455.49 1455.44 1455.43 1455.41
26 27 28 29 30 31	1451.64 1451.76	1451.74	1451.79 1451.81 1451.81 1451.79			1453.80 1453.82 1453.84 1453.85 1453.87 1453.86	1454.19 1454.20 1454.17 1454.17 1454.19	1455.60 1455.58 1455.55 1455.61 1456.35 1457.29	1456.15 1455.97 1455.84 1455.78 1455.71	1455.28 1455.34	1454.94 1454.94 1454.93 1454.90 1454.89 1454.87	1455.40 1455.40 1455.39 1455.38 1455.39
MEAN MAX MIN (+) (#)		1451.74 1451.81 1451.68 196,210 -220	1451.83	1451.95 1452.17 1451.79 200,730 +3,970	1452.14 205,910	1453.42 1453.87 1452.68 220,140 +14,230	1454.07 1454.20 1453.86 224,090 +3,950	1455.62 1457.29 1454.17 263,330 +39,240	1457.13 1457.98 1455.71 242,840 -20,490	1455.36 1455.75 1454.94 238,190 -4,650	1455.01 1455.34 1454.79 232,340 -5,850	1455.11 1455.49 1454.76 238,820 +6,480

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

06875900 SOLOMON RIVER NEAR GLEN ELDER, KS

LOCATION.--Lat $39^{\circ}28^{\circ}27^{\circ}$, long $98^{\circ}16^{\circ}58^{\circ}$, in SE $^{1}/_{4}$ SE $^{1}/_{4}$ NE $^{1}/_{4}$ sec.2, T.7 S., R.9 W., Mitchell County, Hydrologic Unit 10260015, on right bank, 3.6 mi downstream from Glen Elder Dam, 2.0 mi southeast of Glen Elder, and at mile 168.8.

DRAINAGE AREA. -- 5,340 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Concrete control since Mar. 4, 1970. Datum of gage is 1,374.13 ft above sea level (levels by Bureau of Reclamation).

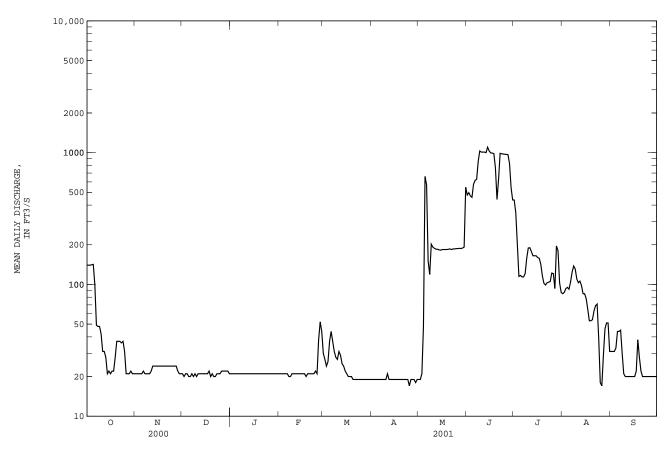
REMARKS.--Records good. Flow mostly regulated since 1967 by Waconda Lake (station 06874200), which in turn is moderately regulated since 1955 by Kirwin Reservoir (station 06871700), and since 1956 by Webster Reservoir (station 06873100). Large diversions downstream from Kirwin and Webster Reservoirs and many small diversions upstream from Waconda Lake for irrigation. Satellite telemeter at station.

		DISCHAR	GE, CUBIC	FEET PER		WATER YEA MEAN VAI		R 2000 TO	SEPTEMBE	R 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	21	21	21	21	30	19	19	477	437	85	31
2	140	21	20	21	21	27	19	19	497	350	87	31
	140	21	21	21	21	24	19	21	469	202	93	31
3 4	141	21	21	21	21	26	19	48	458	115	95	33
5	142	21	20	21	21	37	19	661	575	117	92	44
6	99	22	20	21	21	44	19	569	616	114	104	44
7	49	21	21	21	20	37	19	150	628	114	124	45
8	48	21	20	21	20	31	19	119	860	121	138	30
9	48	21	21	21	21	28	19	202	1030	158	131	21
10	42	21	20	21	21	27	19	192	1010	189	110	20
11	31	22	21	21	21	31	21	188	1010	190	103	20
12	31	24	21	21	21	29	19	185	1010	177	106	20
13	28	24	21	21	21	25	19	185	1000	165	98	20
14	21	24	21	21	21	24	19	183	1100	165	85	20
15	22	24	21	21	21	22	19	182	1030	165	85	20
16	21	24	21	21	21	21	19	184	996	160	78	20
17	22	24	21	21	21	20	19	184	993	158	65	22
18	22	24	22	21	20	20	19	184	982	142	53	38
19	28	24	20	21	21	20	19	184	766	116	53	28
20	37	24	21	21	21	19	19	185	441	102	54	22
21	37	24	20	21	21	19	19	186	626	99	63	20
22	37	24	20	21	21	19	19	184	988	103	69	20
23	36	24	21	21	21	19	19	186	981	104	71	20
24	37	24	21	21	22	19	19	186	976	105	39	20
25	31	24	21	21	21	19	17	187	972	122	18	20
26	21	24	22	21	38	19	19	187	970	121	17	20
27	21	24	22	21	52	19	19	188	966	93	29	20
28	21	22	22	21	44	19	19	187	828	196	46	20
29	22	21	22	21		19	18	189	543	180	51	20
30	21	21	22	21		19	19	192	438	103	51	20
31	21		21	21		19		546		87	31	
MEAN	50.2	22.7	20.9	21.0	23.5	24.2	19.0	202	808	154	75.0	25.3
MAX	142	24	22	21	52	44	21	661	1100	437	138	45
MIN	21	21	20	21	20	19	17	19	438	87	17	20
AC-FT	3090	1350	1290	1290	1300	1490	1130	12420	48070	9460	4610	1510

06875900 SOLOMON RIVER NEAR GLEN ELDER, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	177 3047 1994 11.3 1970	192 2983 1994 7.70 1972	192 2315 1994 1.10 1969	155 2220 1994 8.00 1976	180 1472 1994 11.7 1978	240 1680 1993 8.98 1971	232 1635 1993 9.60 1971	296 1939 1987 15.0 1970	372 2092 1995 16.5 1981	357 2096 1993 28.0 1969	312 3083 1993 26.1 1969	211 3148 1993 18.3 1970
SUMMARY	STATISTI	CS	FOR	2000 CALENI	DAR YEAR	FC	OR 2001 WAT	TER YEAR		WATER YE	ARS 1965	- 2001
SUMMARY STATISTICS ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW				92.7 266 4.7 20	Jan 12 Apr 5 Dec 2		120 1100 17 19 1170 13.34 8.6	Jun 14 Apr 25 Apr 23 Jun 14 Jun 14 Apr 25		243 1369 18.4 7210 .32 .62 9410 29.57 .32	Nov 2 Dec 1 Jul 2 Jul 2	1994 1970 22 1993 22 1971 3 1968 22 1993 22 1993 22 1971
INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS				67290 178 66 21			87010 202 22 19			176300 640 54 14		



06876070 SOLOMON RIVER NEAR SIMPSON, KS

LOCATION.--Lat 39°22'05", long 97°55'44", in SW $^{1}/_{4}$ NW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.7, T.8 S., R.5 W., Cloud County, Hydrologic Unit 10260015, on right bank at downstream side of county highway bridge, 1.0 mile south of Simpson, and at mile 115.4.

DRAINAGE AREA. -- 5,538 mi².

PERIOD OF RECORD. -- October 1990 to current year.

REVISED RECORDS. -- WDR KS-92-1: 1991.

GAGE.--Water-stage recorder. Datum of gage is 1,334.26 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow mostly regulated since 1967 by Waconda Lake (station 06874200), 57.0 mi upstream. Many small diversions upstream from station. Satellite telemeter at station.

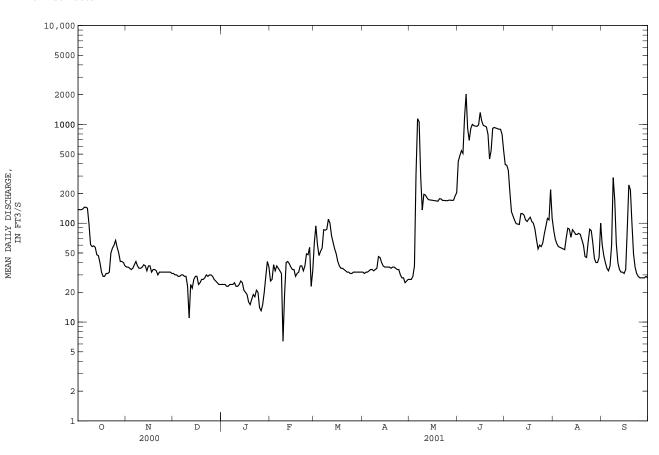
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1951 reached a gage height of 42.2 ft, from floodmark on house on left downstream side of bridge, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DATLY MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP e60 e47 e40 e33 e37 e60 e290 6.4 e172 e62 12 37 21 77 17 29 32 37 36 79 31 17 32 e13 e44 e40 e40 e45 ---e100 MEAN 68.8 34.3 27.0 22.3 34.1 52.2 33.9 67.1 66.7 25 28 MAX 6.4 MIN

06876070 SOLOMON RIVER NEAR SIMPSON, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	358 3108 1994 23.0 1992	422 3055 1994 25.0 1992	483 2519 1994 25.0 1992	405 2374 1994 22.3 2001	421 1574 1994 22.2 1992	499 1924 1993 22.7 1992	417 1820 1993 25.9 1992	530 1395 1993 19.1 1992	661 2133 1995 32.2 1991	911 5033 1993 32.8 2000	718 3671 1993 27.8 2000	429 3368 1993 40.7 1991
SUMMARY	STATISTI	CS	FOR 2	2000 CALEN	DAR YEAR	FC	OR 2001 WAT	TER YEAR		WATER YEA	RS 1991 -	- 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE				95.0 298 9.0 19	Mar 24 Jul 14 Aug 8		2030 6.4 17 2330 16.18	Jun 6 Feb 9 Jan 21 Jun 6 Jun 6		522 1694 75.1 10200 2.1 5.4 10700 32.69	Jun 26 Jun 21 Jul 8	1993 1991 3 1993 5 1991 1 1991 3 1993 3 1993
INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS				68930 180 54 26			2.7 98700 301 39 25	Feb 9		.78 378300 1730 161 29	Jun 27	7 1991



06876700 SALT CREEK NEAR ADA, KS

LOCATION.--Lat $39^{\circ}08^{\circ}30^{\circ}$, long $97^{\circ}50^{\circ}10^{\circ}$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.36, T.10 S., R.5 W., Ottawa County, Hydrologic Unit 10260015, on left bank at downstream side of county highway bridge, 3.0 mi southeast of Ada, and at mile 19.4.

DRAINAGE AREA. -- 384 mi², approximately.

PERIOD OF RECORD.--June 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,247.18 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1942 reached a stage of about 21 ft, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 580 ${\rm ft}^3/{\rm s}$ and maximum (*):

Date	Tin	ne	Discharge (ft ³ /s)	e Gag	e height (ft)		Date	Time	2	Discharge (ft ³ /s)	Gage	height (ft)
Jun 6	154	15	*922	*	14.41		Sep 18	1400	0	824	1	3.81
		DISCHA	ARGE, CUBI	C FEET PE		WATER YI Y MEAN V	EAR OCTOBER ALUES	R 2000 TO	SEPTEME	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.85 .92 1.0 1.1	5.4 5.2 4.5 4.3 4.2	6.5 6.5 6.5 6.8	e7.5 e8.0 e8.6 e8.8 e9.0	12 13 12 12 12	50 e36 54 80 64	17 17 17 17 17	22 22 21 21 90	138 107 80 60 321	12 11 11 9.9	8.5 6.1 4.7 4.0 3.4	4.1 3.9 3.9 4.0 4.0
6 7 8 9 10	1.3 1.5 1.6 1.7 2.0	4.7 4.9 5.1 6.0 5.2	6.9 7.3 7.4 7.4 e6.9	e9.1 e9.1 e9.1 e9.2	13 e13 e14 e13 e13	52 39 31 29 31	18 19 18 17 16	218 311 175 109 76	883 719 464 363 238	10 9.5 8.6 8.1 7.5	3.0 2.8 2.6 2.6 3.1	3.9 4.0 41 12 11
11 12 13 14 15	2.5 2.5 2.6 4.4 4.7	5.0 e5.0 e5.1 e5.3 e5.5	e6.8 e6.8 e6.9 e7.1	e9.2 e9.0 e8.8 e8.7 e8.6	e12 e12 e12 e12 e12	47 72 57 42 35	204 138 80 47 37	61 46 36 30 25	172 130 93 72 61	6.9 6.8 6.7 6.9 7.0	3.4 3.1 3.0 3.1 2.8	7.2 5.9 4.4 3.9 3.9
16 17 18 19 20	5.3 4.9 4.1 3.9 3.7	5.7 5.8 5.8 5.9	e7.2 e7.2 e7.2 e7.2 e7.2	e8.0 e8.6 e8.6 e8.0 e8.5	e13 14 15 16 17	30 26 25 23 22	33 29 25 24 23	22 20 18 17 20	53 45 39 33 30	7.1 6.8 6.1 5.8 5.3	2.6 2.8 3.0 3.0 2.8	4.7 150 717 419 121
21 22 23 24 25	3.8 4.5 4.9 5.1 6.8	6.0 6.1 6.2 6.3 6.4	e7.3 e7.4 e7.0 e6.9 e6.9	e8.7 e9.0 e9.2 e9.3 e9.5	16 16 20 242 208	22 21 20 19 18	24 94 166 112 90	42 42 30 24 20	30 29 26 23 21	4.8 4.8 4.7 4.7	2.6 2.4 22 221 147	52 31 21 16 13
26 27 28 29 30 31	7.9 6.3 5.1 6.3 5.3	6.4 6.5 6.6 6.7 6.6	e7.4 e7.8 e7.8 e7.5 e7.2 e7.2	e10 e10 11 12 13	154 107 88 	17 17 17 17 17 17	67 49 37 30 24	18 17 15 15 81 186	17 16 15 14 13	6.4 8.2 8.9 14 16	60 16 8.7 6.2 5.0 4.5	11 10 9.0 8.0 7.4
MEAN MAX MIN AC-FT	3.68 7.9 .85 226	5.61 6.7 4.2 334	7.08 7.8 6.5 435	9.26 13 7.5 570	39.8 242 12 2210	33.8 80 17 2080	50.2 204 16 2990	59.7 311 15 3670	144 883 13 8540	8.16 16 4.4 502	18.3 221 2.4 1120	56.9 717 3.9 3390

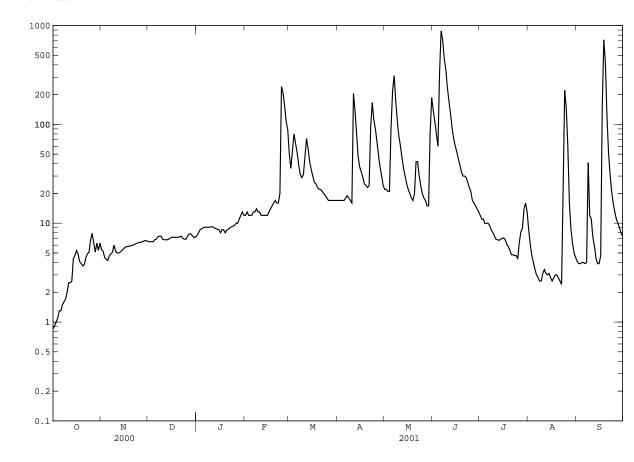
06876700 SALT CREEK NEAR ADA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	42.0 827 1974 .014 1967	28.1 216 1999 .13 1967	21.2 203 1974 .39 1967	24.8 277 1974 1.14 1967	45.4 495 1993 1.71 1967	106 899 1973 1.25 1967	104 898 1987 3.61 1992	146 1201 1995 1.62 1967	1	101 578 993 .48 966	138 2595 1993 .20 1970	35.4 292 1993 .052 1970	41.5 677 1973 .43 1991
SUMMARY	Y STATIST	ICS	FOR 2	2000 CALEN	DAR YEAR	F	OR 2001 WA	TER YE	AR		WATER YE	ARS 1960	- 2001
LOWEST	ANNUAL M	EAN		21.7			36.0				69.6 469 3.81		1993 1966
	C DAILY M			709	Mar 24		883	Jun	6		10400		23 1961
	DAILY ME	AN Y MINIMUM		.85 1.0	Oct 1 Sep 13		.85 1.1	Oct Oct	1		.00		21 1964 5 1964
	JEVEN-DA M PEAK FL			1.0	Seb 13		922	Jun	6		16000		23 1961
	M PEAK ST						14.41		6		23.25		23 1961
	TANEOUS L						.80		ĺ		.00		y years
ANNUAL	RUNOFF (AC-FT)		15720			26060				50420		
10 PERG	CENT EXCE	EDS		40			80				105		
50 PERG	CENT EXCE	EDS		7.7			10				12		
90 PER	CENT EXCE	EDS		1.3			3.9				1.6		

e Estimated

MEAN DAILY DISCHARGE, IN FT3/S



06876900 SOLOMON RIVER AT NILES, KS

LOCATION.--Lat $38^{\circ}58^{\circ}08^{\circ}$, long $97^{\circ}28^{\circ}34^{\circ}$, in NW $^{1}/_{4}$ SE $^{1}/_{4}$ NW $^{1}/_{4}$ sec.31, T.12 S., R.1 W., Ottawa County, Hydrologic Unit 10260015, on right bank at downstream side of county highway bridge, 0.8 mi west of Niles, and at mile 21.6.

WATER-DISCHARGE RECORDS

DRAINAGE AREA. -- 6,770 mi², approximately.

AC-FT

PERIOD OF RECORD.--May 1897 to November 1903, October 1917 to current year. Published as "near Bennington" October 1917 to May 1919. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 806: Drainage area. WSP 926: 1935. WSP 1310: 1897-1903. WSP 1440: 1903, 1919, 1927.

GAGE.--Water-stage recorders. Datum of gage is 1,160.97 ft above sea level. Prior to Nov. 30, 1903, nonrecording gage at present site and at different datum. Oct. 1, 1917, to May 31, 1919, nonrecording gage near Bennington, 27 mi upstream at different datum. June 1, 1919, to Sept. 30, 1922, nonrecording gage at present site at datum 2.00 ft higher. Oct. 1, 1922, to Apr. 25, 1934, nonrecording gage at present site and datum.

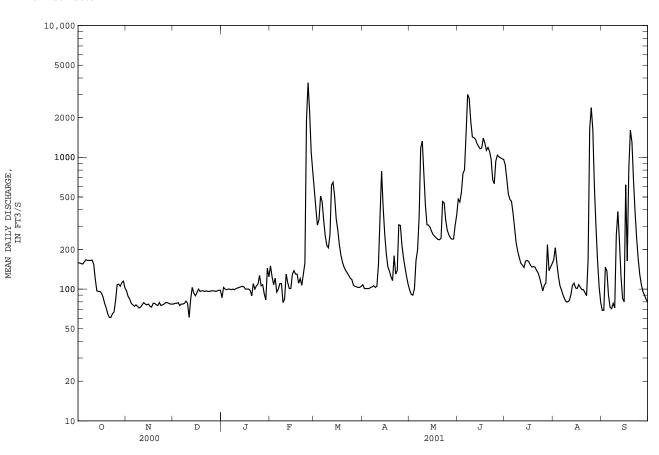
REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow moderately regulated since 1967 by Waconda Lake (station 06874200), 150.8 mi upstream. Slight regulation since 1955 by Kirwin Reservoir (station 06871700) and since 1956 by Webster Reservoir (station 06873100). Many small diversions upstream from station for irrigation. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV DEC FEB MAY AUG SEP JAN APR JUL e86 e103 e100 e99 e100 7 e100 165 78 253 78 e99 e100 e99 e101 e102 e130 77 e103 e104 101 647 784 1270 e105 e104 e100 78 e100 e100 e97 e98 e97 e1300 e96 e664 243 e97 e100 e96 e96 e97 e97 e97 e96 e97 e98 ---MEAN 77.6 88.9 MAX MTN

06876900 SOLOMON RIVER AT NILES, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	401 6545 1974 16.2 1923	265 3336 1994 22.5 1957	213 2844 1994 19.0 1957	201 2595 1994 17.5 1940	296 2129 1993 26.3 1957	424 2693 1993 35.9 1957	535 3393 1987 41.7 1940	833 5549 1903 32.1 1956	1356 12150 1951 69.7 1933	1127 23080 1951 27.1 1901	616 4699 1950 17.9 1901	643 5066 1946 5.60 1956
SUMMARY STATISTICS			FOR 2	2000 CALE	NDAR YEAR	F	OR 2001 W	ATER YEAR		WATER YE	ARS 1898	- 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN				190 2030 46	Mar 25 Aug 15		300 3690 61	Feb 25 Oct 21		576 4113 92.3 157000 1.0	Jul : Sep	1951 1970 14 1951 4 1926
ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS				51 137800 356	Aug 12		67 3950 17.8 31 217100 814	Oct 18 Feb 25		4.2 178000 31.76 1.0 417600 1240	Sep 2 Jul 3 Jul 3	22 1956 14 1951 14 1951 4 1926
	10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS			134 63			120 78			161 50		



06876900 SOLOMON RIVER AT NILES, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. -- Water years 1959 to 1987, 2000 to current year.

 ${\tt REMARKS.--Unpublished \ records \ of \ intermittent \ sediment \ samples \ are \ available \ on \ the \ World \ Wide \ Web \ at \ http://ks.water.usgs.gov/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linea$ nwis. Sediment samples are collected only at selected flow conditions.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

			***************************************	ZOIMIII D	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		TODDIC DOO	0 10 0211	DI IDDIC DOO	-			
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)
APR 11 MAY	0920	155	1530	16.0	290	121							
08 10	1335 1010	1220 730	1390 1130	19.5 21.0	1470 1310	4830 2580							
JUN 07 JUL	1045	3360	740	21.0	1850	16800	61	66	70	76	87	98	99
10	1545	169	1430	29.4	280	128							
				DA	DATE		SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)					
				MAY	1								
				1	8								
				JUN 0 JUL	7	100	100	100					
					0								

AC-FT

06877600 SMOKY HILL RIVER AT ENTERPRISE, KS

LOCATION.--Lat $38^{\circ}54^{\circ}24^{\circ}$, long $97^{\circ}07^{\circ}12^{\circ}$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.20, T.13 S., R.3 E., Dickinson County, Hydrologic Unit 10260008, on right bank at downstream side of bridge on Kansas Highway 43 in Enterprise, 18.6 mi upstream from Chapman Creek, and at mile 43.3.

WATER-DISCHARGE RECORDS

DRAINAGE AREA. -- 19,260 mi2.

PERIOD OF RECORD. -- October 1934 to current year.

REVISED RECORDS. -- WSP 1390: 1935(M).

GAGE.--Water-stage recorder. Datum of gage is 1,098.25 ft above sea level. Nov. 1, 1934, to Jan. 28, 1935, nonrecording gage and Jan. 29, 1935, to May 3, 1959, water-stage recorder at site 0.2 mi downstream at datum 0.40 ft lower, May 4, 1959 to Sept. 30, 1991 datum of gage 5.00 ft higher at same site. July 16, 1998 moved gage to new State Highway 43 bridge about 0.1 mi downstream from previous site at previous datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by six lakes or reservoirs, and by numerous diversions upstream from station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1903 reached stage of about 27 ft, present site and datum, from information by U.S. Army Corps of Engineers, discharge, 90,000 ft³/s.

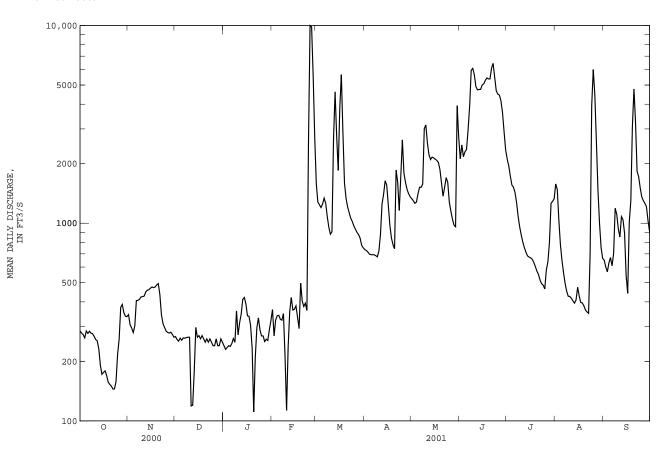
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN TTTT. ATIG SEP e240 e230 e235 e240 7 723 e270 e2110 e2080 e260 e270 e2030 e1300 e1870 e260 743 e3080 e250 e4780 e3250 e150 e260 e145 e250 e145 e260 e702 e250 e3940 e240 e4470 e240 e260 e240 e240 e260 ---e250 ---MEAN MAX MIN

06877600 SMOKY HILL RIVER AT ENTERPRISE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN 1326 858 MAX 15720 6269 (WY) 1974 1974 MIN 65.9 96.6 (WY) 1992 1940	659 603 5723 4925 1974 1994 74.2 55.0 1957 1940	916 5776 1949 89.0 1957	1343 8584 1973 98.1 1935	1784 9597 1973 96.0 1935	2387 11620 1995 102 1956	3233 22500 1951 310 1988	3079 45080 1951 141 1991	1624 11460 1993 121 1936	1682 12130 1951 58.6 1956
SUMMARY STATISTICS	FOR 2000 CALE	NDAR YEAR	FOF	2001 WAT	TER YEAR		WATER YE	ARS 1935	- 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS	894 11200 119 154 648800 1680 734 252	Mar 25 Dec 11 Oct 18	3	1230 10000 111 154 11300 20.21 70 390700 3040 664 250	Feb 25 Jan 20 Oct 18 Feb 25 Feb 25 Jan 20		1627 8855 293 207000 38 44 233000 33.96 1179000 3960 571 161	Sep 2 Sep 2 Jul 3 Jul 3	1951 1956 14 1951 23 1956 20 1956 14 1951 23 1935



06877600 SMOKY HILL RIVER AT ENTERPRISE, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956-95, 2000 to current year.

PERIOD OF DAILY RECORD. -- October 1957 to September 1975.

REMARKS.--Unpublished records of intermittent sediment samples are available on the World Wide Web at http://ks.water.usgs.gov/nwis.

Sediment samples are collected only at selected flow conditions.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. FINER THAN .062 MM	
		(00061)	(00095)	(00010)	(80154)	(80155)	(70331)	(70337)	(70338)	(70339)	(70340)	(70341)	(70342)	
APR 13 MAY	1150	1370	1110	19.0	604	2240								
09	1015	2280	1210	21.5	1990	12300	96							
10	1315	3020	793	22.0	1830	14900	97							
30	1445	4820	558	19.5	3270	42600		55	53	60	61	79	95	
JUL														
11	1010	787	1830	28.0	326	692								

DATE	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
APR				
13				
MAY				
09				
10				
30	99	100	100	100
JUL				
11				

06878000 CHAPMAN CREEK NEAR CHAPMAN, KS

LOCATION.--Lat $39^{\circ}01'52"$, long $97^{\circ}02'24"$, in SW $^1/_4$ SE $^1/_4$ SE $^1/_4$ sec.1, T.12 S., R.3 E., Dickinson County, Hydrologic Unit 10260008, on right bank at downstream side of bridge on Kansas Highway 18, 5.0 mi northwest of Chapman, and at mile 10.0.

DRAINAGE AREA.--300 mi².

PERIOD OF RECORD. -- December 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,102.41 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to May 5, 1959, nonrecording gage at same site and datum.

REMARKS. -- Records good. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood in July 1951 reached a stage of 25.5 ft, from floodmarks, discharge, $46,700 \text{ ft}^3/\text{s}$, from rating curve extended above 12,000 ft $^3/\text{s}$ on basis of contracted-opening measurement of peak flow.

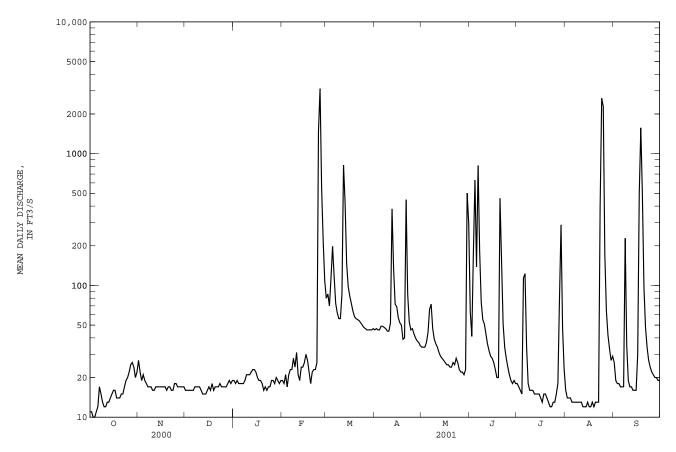
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

Date	Tim	ie	Discharge (ft ³ /s)	e Gage	e height (ft)		Date	Time		Discharge (ft ³ /s)		height ft)
Feb 25 May 30 Jun 6	110 180 100	0	*3,590 1,230 1,330	-	20.18 14.67 15.07		Aug 25 Sep 18	0100 1400		3,490 1,900		1.88 7.28
		DISCHA	ARGE, CUBIC	FEET PEI		WATER YE Y MEAN VA	AR OCTOBER LUES	2000 TO S	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	11 11 10 10	27 22 19 21 19	16 16 16 16 16	19 18 19 18 18	19 18 21 17 21	80 86 70 114 198	46 47 46 46 49	34 34 34 37 44	63 41 180 629 138	18 17 16 15 114	16 14 14 14 13	26 19 18 18 17
6 7 8 9 10	12 17 15 13	18 17 17 17 16	16 17 17 17 17	18 18 19 21 21	23 23 28 24 31	117 73 62 56 56	49 48 47 45 45	66 72 47 39 36	811 181 75 55 51	123 34 18 16 16	13 13 13 13 13	17 17 228 35 19
11 12 13 14 15	12 13 13 14 15	16 17 17 17 17	16 15 15 15 16	21 22 23 23 22	21 19 24 24 26	86 819 426 146 98	52 381 134 72 69	34 31 29 28 27	43 36 32 29 28	16 15 15 15 15	13 12 12 12 12	17 17 16 16 16
16 17 18 19 20	16 16 14 14	17 17 17 16 17	17 16 18 16 17	20 19 19 18 16	30 27 22 18 22	83 73 64 58 56	57 52 50 39 40	26 25 25 24 24	26 23 20 20 458	14 13 15 15 14	12 12 13 12 13	30 496 1570 486 96
21 22 23 24 25	15 15 17 19 20	17 16 16 18 18	17 17 18 17 17	17 16 17 17 19	23 23 26 1480 3120	55 54 52 50 48	447 86 53 46 47	26 25 28 26 23	154 51 34 28 24	13 12 12 13 13	13 13 397 2630 2280	48 34 27 24 22
26 27 28 29 30 31	22 25 26 24 20 22	17 17 17 17 17	17 17 18 19 18	19 18 20 19 18 19	553 217 108 	47 46 46 46 46 47	43 40 38 37 35	22 22 21 23 502 298	21 19 18 19 18	15 18 77 288 47 23	171 64 42 33 27 29	21 20 20 19 19
MEAN MAX MIN AC-FT	15.7 26 10 968	17.7 27 16 1050	16.7 19 15 1030	19.1 23 16 1170	215 3120 17 11920	108 819 46 6660	76.2 447 35 4530	55.9 502 21 3440	111 811 18 6600	34.4 288 12 2110	192 2630 12 11820	114 1570 16 6800

06878000 CHAPMAN CREEK NEAR CHAPMAN, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	71.7 943 1974 2.64 1958	52.6 659 1999 1.69 1957	35.4 214 1974 3.23 1957	37.1 223 1962 3.60 1957	67.1 263 1969 5.30 1957	118 690 1973 4.53 1957	102 594 1999 5.60 1956	185 1115 1995 4.14 1956	166 963 1977 7.11 1956	136 1479 1993 3.61 1955	68.5 375 1977 .86 1955	74.4 598 1973 3.77 1957
SUMMARY STATISTICS			FOR 2000 CALENDAR YEAR			FC	OR 2001 WAS	TER YEAR		WATER YEARS 1955 - 2001		
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW			37.4 603 Jun 20 5.5 Aug 30 5.7 Aug 28				3120 10 12 3590 20.18	Feb 25 Oct 3 Oct 1 Feb 25 Feb 25 Oct 2	11.4 19 12600 Oct 12 19 .20 Oct 10 19 .41 Sep 20 19 15800 Oct 12 19 24.08 Oct 12 19 .10 Oct 10 19			0 1956 0 1956 2 1973 2 1973
ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS				27130 52 22 8.8			58100 90 21 14			67370 125 24 7.9		



06879100 KANSAS RIVER AT FORT RILEY, KS

LOCATION.--Lat 39°03'09", long 96°46'33", in NE $^1/_4$ SW $^1/_4$ NW $^1/_4$ sec.33, T.11 S., R.6 E., Geary County, Hydrologic Unit 10270101, on right bank at downstream side of military highway bridge, 1.6 mi downstream from the confluence of the Republican and Smoky Hill Rivers, and at mile 168.9.

DRAINAGE AREA. --44,870 mi², of which a large area is noncontributing.

PERIOD OF RECORD. -- December 1963 to current year.

AC-FT

GAGE.--Water-stage recorder. Datum of gage is 1,034.69 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by reservoirs in Colorado, Nebraska, and Kansas, and by numerous diversions upstream from station. Satellite telemeter at station.

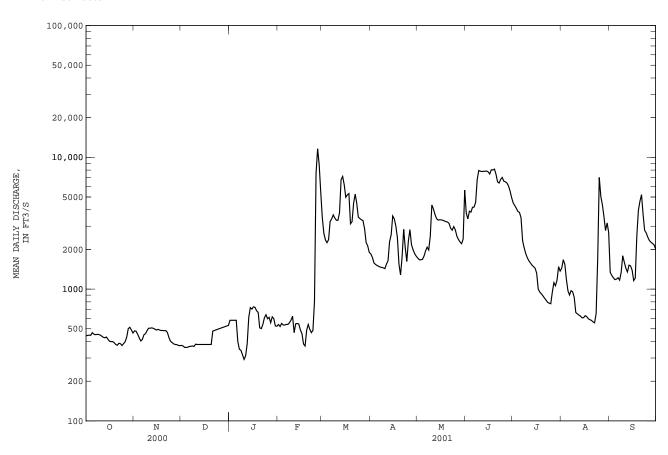
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1951 reached a stage of 34.5 ft, from information by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY NOV DEC FEB MAY AUG SEP e580 e580 e580 e580 e580 e400 e350 e380 13 427 e380 e380 e380 e380 e380 e380 685 5310 3290 596 2530 e380 e380 e380 e480 e485 e490 e495 e500 e505 e510 e515 e520 e525 ___ MEAN MAX MIN

06879100 KANSAS RIVER AT FORT RILEY, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN 2476 2121 MAX 26340 16650 (WY) 1974 1974 MIN 335 226 (WY) 1981 1992	1870 1264 10070 7041 1974 1974 204 207 1992 1992	1953 8689 1993 182 1992	3052 13800 1973 204 1992	3452 16580 1987 210 1992	4300 16640 1993 191 1992	4433 18730 1995 408 1988	4518 40990 1993 240 1991	3009 24050 1993 447 1970	2336 16210 1993 409 1976
SUMMARY STATISTICS	FOR 2000 CALE	FOR 2001 WATER YEAR				WATER YEARS 1965 - 2001			
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS	1189 12900 361 365 863500 2380 910 386	Mar 26 Dec 3 Dec 3		1989 11600 293 343 12200 10.9 276 1440000 5010 1180 385	Feb 26 Jan 10 Jan 6 Feb 26 7 Feb 26 Feb 17		2904 12500 625 83700 130 152 87600 27,93 100 2104000 7140 1310 400	Dec 2 May Jul 2 Jul 2	1993 1991 25 1993 25 1966 7 1992 26 1993 26 1993 24 1966



06879650 KINGS CREEK NEAR MANHATTAN, KS

LOCATION.--Lat 39 $^{\circ}$ 06 $^{\circ}$ 07 $^{\circ}$, long 96 $^{\circ}$ 35 $^{\circ}$ 42 $^{\circ}$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ NW $^{1}/_{4}$ Sec.18, T.11 S., R.8 E., Riley County, Hydrologic Unit 10270101, on left bank, 6.0 mi south of Manhattan, and at mile 2.9.

DRAINAGE AREA.--4.09 \min^2 .

PERIOD OF RECORD.--April 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,094.65 ft above sea level.

REMARKS.--Records fair. Satellite telemeter at station.

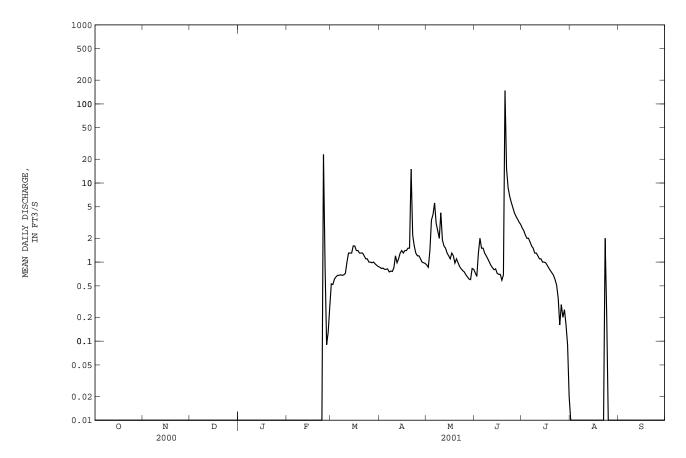
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ${\rm ft}^3/{\rm s}$ and maximum (*):

Date	Time		Discharge (ft ³ /s)	Gag	e height (ft)		Date	Tim	ie	Discharge (ft ³ /s)		height ft)	
Feb 24 Apr 21	0845 0315		284 160		5.65 5.00		Jun 20 Aug 23	010 221		*2,180 56		9.46 4.69	
						WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 MEAN VALUES							
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1 2 3 4 5	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00	.00 .00 .00 .00	.53 .52 .61 .65	.86 .83 .84 .81	.92 .86 1.4 3.4 4.0	.73 .66 1.3 2.0 1.5	2.7 2.5 2.2 2.0 2.0	.00 .00 .00 .00	.00 .00 .00 .00	
6 7 8 9	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.68 .69 .68 .69	.82 .75 .77 .76	5.6 3.1 2.5 2.0 4.2	1.5 1.3 1.2 1.1	1.8 1.6 1.5 1.3	.00 .00 .00 .00	.00 .00 .00 .00	
11 12 13 14 15	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	1.0 1.3 1.3 1.3	1.2 .98 1.1 1.3 1.4	1.9 1.6 1.5 1.3	.91 .85 .80 .82	1.2 1.1 1.1 1.0 1.0	.00 .00 .00 .00	.00 .00 .00 .00	
16 17 18 19 20	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	1.6 1.4 1.4 1.3	1.3 1.4 1.4 1.5	1.1 1.3 1.2 .97 1.1	.70 .70 .59 .69	.98 .91 .84 .78	.00 .00 .00 .00	.00 .00 .00 .00	
21 22 23 24 25	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00	.00 .00 .00 23	1.3 1.2 1.1 1.1	15 2.2 1.6 1.3 1.2	.98 .88 .82 .78	15 8.7 6.8 5.7 4.9	.68 .60 .51 .35	.00 .00 2.0 .21 .00	.00 .00 .00 .00	
26 27 28 29 30 31	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00 .00	.00 .00 .00 .00	.09 .13 .27 	1.0 .98 1.0 .95 .91	1.2 1.1 1.0 .98 .96	.69 .65 .61 .60 .83	4.2 3.8 3.5 3.2 3.0	.29 .20 .25 .16 .09	.00 .00 .00 .00	.00 .00 .00 .00	
MEAN MAX MIN AC-FT	.000 .00 .00	.000	.000	.000	.87 23 .00 48	1.01 1.6 .52 62	1.59 15 .75 95	1.60 5.6 .60 98	7.53 148 .59 448	1.03 2.7 .02 63	.071 2.0 .00 4.4	.000 .00 .00	

06879650 KINGS CREEK NEAR MANHATTAN, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB		MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	1.46 10.9 1999 .000 1980	1.76 24.7 1999 .000 1980	.90 8.09 1993 .000 1980	.51 2.32 1999 .000 1980	1.20 4.51 1993 .000 1980		3.14 12.5 1984 .000 1981	5.78 21.9 1999 .000 1981	6.98 43.7 1995 .000 1989	3.16 10.2 1982 .000 1989	4.19 43.5 1993 .000 1988	.58 4.11 1998 .000 1980	.25 2.46 1989 .000 1980
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	AR YE	AR	FC	OR 2001 WAS	TER YEAR	WATER YEARS 1980 - 2001			
	MEAN 'ANNUAL M ANNUAL M		.46					1.13				1993 1989	
HIGHEST	DAILY M	EAN		5.9	Jul	4		148	Jun 20		464	May	13 1995
LOWEST	DAILY MEA	AN		.00	Jan	1		.00	Oct 1		.00	0ct	1 1979
ANNUAL	SEVEN-DAY	Y MINIMUM		.00	Jan	1		.00	Oct 1		.00	Oct	1 1979
MAXIMUM PEAK FLOW								2180	Jun 20		10200		13 1995
MAXIMUM PEAK STAGE								9.46	Jun 20		13.98		13 1995
	ANEOUS LO							.00	Oct 1		.00	man	y years
ANNUAL RUNOFF (AC-FT)				337				819			1810		
10 PERCENT EXCEEDS				1.5				1.5			5.5		
50 PERCENT EXCEEDS .00						.00				.17	.17		
90 PERC	ENT EXCE	.00				.00			.00				



06882510 BIG BLUE RIVER AT MARYSVILLE, KS

LOCATION.--Lat 39°50'31", long 96°39'39", in NE 1 / $_{4}$ NW 1 / $_{4}$ NE 1 / $_{4}$ sec.32, T.2 S., R.7 E., Marshall County, Hydrologic Unit 10270205, on right bank at downstream side of bridge on U.S. Highway 36, 0.3 mi west of Marysville, and at mile 84.6.

DRAINAGE AREA.--4,777 mi².

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,110.31 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Power plant located 0.8 mi upstream. Some pump diversions for irrigation upstream from station. Natural flow affected by ground-water withdrawals for irrigation and return flow from irrigated areas. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1903 reached a stage of 43.79 ft, from floodmarks. Flood of June 9, 1941, reached a stage of 45.39 ft, from floodmarks; no discharge determined. Flood of June 15, 1951, reached a stage of 40.22 ft, from U.S. Weather Bureau wire-weight gage reading; discharge 55,600 ft³/sec, by contracted-opening measurement of peak flow. Flood of Oct. 13, 1973, reached a stage of 43.86 ft, from wire-weight gage readings.

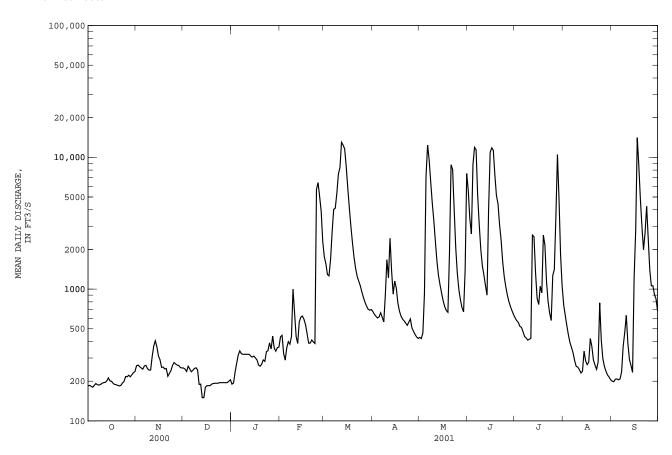
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft^3/s and maximum (*):

Date	Ti	me	Discharg (ft ³ /s)	e Gag	e height (ft)		Date	Tin	ne	Discharge (ft ³ /s)	Gage	e height (ft)
Feb 24 Mar 12 May 6 May 21	20 06 03 16	00 00	11,900 14,100 13,400 10,300		22.85 24.38 23.91 21.92		Jun 5 Jun 16 Jul 28 Sep 17	170 24 070 120	00 00	16,800 12,400 12,400 *17,200	2	26.09 23.24 23.20 26.31
		DISCHA	ARGE, CUBI	C FEET PE		, WATER YE LY MEAN VA		ER 2000 TO) SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	262	252	e190	434	1760	677	430	5590	603	756	200
2	186	265	247	e194	446	1560	643	421	3410	576	631	198
3	183	258	237	e235	325	1290	622	466	2620	558	528	207
4	180	252	260	e274	289	1260	604	924	8820	522	449	208
5	186	247	248	e316	359	1680	615	7140	11900	512	392	205
6	192	261	236	e340	399	2720	661	12400	11400	475	360	208
7	188	264	242	e323	382	4030	612	9580	5170	437	327	236
8	187	249	250	e320	436	4110	564	6510	3100	426	286	368
9	189	243	253	e320	1000	5320	901	4500	2010	410	259	468
10	193	243	244	e320	659	7460	1670	3300	1500	416	256	632
11	195	308	189	e320	436	8360	1220	2290	1280	424	245	389
12	196	370	190	e320	387	13000	2430	1620	1060	2570	231	292
13	201	405	e150	e310	564	12400	1380	1260	900	2500	238	263
14	212	365	e150	e305	612	11600	916	1070	4080	1330	339	233
15	201	311	e180	e310	625	8520	1150	928	10900	849	285	1230
16	200	291	e185	e300	590	5850	1020	812	11800	764	267	2790
17	193	255	e185	e290	537	4120	788	733	11300	1050	279	14100
18	189	256	e185	e265	459	2990	682	687	7360	938	422	8610
19	188	248	e190	e260	389	2240	625	667	5130	2570	366	4800
20	186	250	e192	e270	389	1740	592	1900	4450	2150	289	2970
21	184	218	e193	e290	411	1440	574	8780	3080	1140	265	1990
22	186	229	e193	283	397	1250	553	8090	2350	809	246	2680
23	194	241	e193	335	387	1150	531	3980	1610	659	280	4250
24	199	264	e195	341	5700	1060	561	2060	1240	578	787	2430
25	217	277	e195	391	6440	952	594	1320	1040	1270	412	1400
26 27 28 29 30 31	216 222 216 224 232 237	270 265 263 254 252	e195 e195 e195 e195 e200 e205	351 439 357 338 359 363	5060 3890 2290 	864 795 743 704 692 700	507 479 453 433 422	991 827 723 672 1390 7540	899 802 734 683 638	1410 3560 10500 4800 1810 1050	298 259 238 223 215 205	1060 1060 909 843 680
MEAN	199	271	207	311	1225	3625	783	3033	4229	1538	343	1864
MAX	237	405	260	439	6440	13000	2430	12400	11900	10500	787	14100
MIN	180	218	150	190	289	692	422	421	638	410	205	198
AC-FT	12210	16140	12730	19100	68020	222900	46570	186500	251600	94550	21090	110900

06882510 BIG BLUE RIVER AT MARYSVILLE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2001, BY WATER YEAR (WY)

OCT NO	V DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN 743 60 MAX 5114 217 (WY) 1987 199 MIN 87.5 14 (WY) 1992 199	2 1016 9 1998 6 179	377 644 1987 182 1991	680 2157 1993 208 1990	1579 7346 1987 243 1991	1129 4912 1987 211 1989	1843 5946 1995 187 1989	2132 4229 2001 294 1988	2708 15000 1993 520 1988	1090 2751 1993 170 1988	1079 3957 1989 109 1991
SUMMARY STATISTICS	FOR	2000 CAL	ENDAR YEAR	F	FOR 2001 V	VATER YEAR		WATER Y	EARS 1985	- 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINI MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLO ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS		10400 150 158 340200 510 334 186	Jul 4 Dec 13 Aug 13		1467 14100 150 175 17200 26.3 150 1062000 4170 437 195	Sep 17 Dec 13 Dec 12 Sep 17 31 Sep 17 Dce 13		1205 3318 413 34400 23 71 39700 38.9 177 873000 2680 466 200	Sep Jul	1993 1988 7 1986 25 1991 6 1986 6 1986 4 1991



06884200 MILL CREEK AT WASHINGTON, KS

LOCATION.--Lat 39°48'50", long 97°02'20", in SW $^1/_4$ SW $^1/_4$ SE $^1/_4$ sec.1, T.3 S., R.3 E., Washington County, Hydrologic Unit 10270207, on right bank at downstream side of bridge in roadside park on U.S. Highway 36, 0.5 mi east of Washington, and at mile 26, approximately.

DRAINAGE AREA. -- 344 mi².

PERIOD OF RECORD. -- October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,261.56 ft above sea level.

Discharge

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Low flow partially regulated at times by irrigation. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum known stages since at least 1903, about 36 ft June 8, 1941, about 34 ft in 1903 and 1908, from information by local residents and newspaper files.

Discharge

Gage height

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

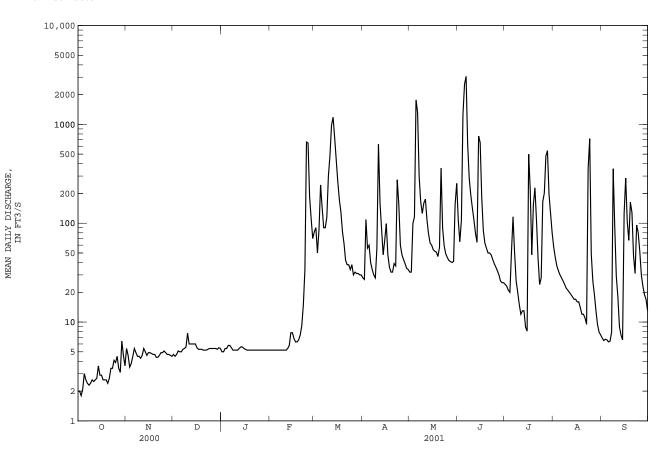
Gage height

Date	Tim	ne	(ft ³ /s)	day	(ft)		Date	Time	2	(ft ³ /s)	Gage	(ft)
Apr 11 May 5 Jun 6	093 164 021	:5	1,410 2,140 *4,190		10.44 13.05 *18.88		Jun 14 Aug 24	111 031		1,210 1,750		9.63 1.70
		DISCHA	RGE, CUBIC	FEET PI	ER SECOND, DAIL	WATER YE Y MEAN VA		R 2000 TO	SEPTEMBI	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	2.0 2.0 1.8 2.1 3.0	5.4 4.6 3.5 3.8 4.5	4.7 4.5 4.7 5.1	e5.0 e5.4 e5.4 e5.8	e5.2 e5.2 e5.2 e5.2 e5.2	e82 e90 e50 e86 e244	28 27 109 56 60	32 32 99 116 1770	108 65 107 1260 2540	24 23 21 20 51	57 45 37 33 30	6.9 6.5 6.7 6.6 6.3
6 7 8 9 10	2.6 2.4 2.3 2.4 2.6	5.4 4.9 4.5 4.5 4.3	5.0 5.3 5.4 5.6 7.7	e5.8 e5.5 e5.2 e5.2 e5.2	e5.2 e5.2 e5.2 e5.2 e5.2	e144 e90 e90 e115 e298	40 34 30 28 56	1320 298 165 126 160	3060 633 286 193 143	116 50 26 20 15	28 26 24 22 21	6.4 7.9 356 93 29
11 12 13 14 15	2.5 2.6 2.7 3.6 2.9	4.6 5.4 5.0 4.6 4.9	e6.0 e6.0 e6.0 e6.0	e5.2 e5.4 e5.6 e5.6 e5.4	e5.2 e5.4 e5.8 e7.8 e7.8	e484 e982 e1180 e734 e440	629 161 87 48 67	175 108 78 63 60	108 79 64 762 654	12 13 13 8.9 8.1	20 19 18 17 17	18 9.0 7.4 6.6 126
16 17 18 19 20	2.9 2.6 2.6 2.6 2.4	4.9 4.8 4.7 4.7	e5.5 e5.3 e5.3 e5.3 e5.2	e5.3 e5.2 e5.2 e5.2 e5.2	e6.8 e6.3 e6.3 e6.6 e7.4	e265 e173 e130 e82 e62	99 48 36 32 32	54 52 51 46 57	183 85 63 56 50	499 217 48 154 228	16 16 14 12	286 103 67 163 128
21 22 23 24 25	2.7 3.4 3.4 4.1 3.9	4.4 4.6 4.9 4.9 5.1	e5.2 e5.2 e5.3 e5.4 e5.4	e5.2 e5.2 e5.2 e5.2 e5.2	e9.2 e15 34 662 648	e42 e38 e38 e34 e38	39 37 275 156 60	362 89 59 49 45	50 48 43 39 36	106 44 24 28 165	11 9.5 358 716 49	47 31 96 80 52
26 27 28 29 30 31	4.5 3.4 3.1 6.4 4.6 3.6	4.9 4.7 4.7 4.6 4.5	e5.4 e5.4 e5.4 e5.3 e5.5	e5.2 e5.2 e5.2 e5.2 e5.2	185 e110 e70 	e30 32 31 31 30 30	48 43 39 35 34	42 41 40 41 156 253	33 30 26 25 25	202 480 541 195 125 80	26 19 13 9.4 7.9 7.4	30 23 19 17 13
MEAN MAX MIN AC-FT	3.02 6.4 1.8 186	4.69 5.4 3.5 279	5.44 7.7 4.5 334	5.29 5.8 5.0 325	66.1 662 5.2 3670	200 1180 30 12290	82.4 629 27 4910	195 1770 32 11980	362 3060 25 21530	115 541 8.1 7060	55.2 716 7.4 3390	61.6 356 6.3 3660

06884200 MILL CREEK AT WASHINGTON, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG SEP
MEAN MAX (WY) MIN (WY)	71.8 839 1974 1.11 1967	51.1 359 1973 1.50 1967	32.0 176 1993 1.39 1967	46.3 367 1962 1.06 1967	85.7 505 1969 2.23 1967	184 1264 1979 5.81 1967	127 725 1987 6.23 1966	201 1161 1995 3.54 1966	6.38	136 2151 1993 .33 1964	61.0 97.9 344 864 1968 1973 1.15 2.08 1991 2000
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	DAR YEAR	FC	OR 2001 WAT	ER YE	AR	WATER YE	ARS 1960 - 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN				16.8			96.1			108 468 12.7	1993 1964
LOWEST	HIGHEST DAILY MEAN LOWEST DAILY MEAN			652 1.5	Jul 29 Aug 16		3060 1.8	Jun Oct	6	10000	Jul 7 1993 Jun 29 1963
ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE				1.8	Aug 29		2.3 4190 18.88	Oct Jun Jun	1 6 6	.00 14600 29.35	Jun 29 1963 Jul 7 1993 Jul 7 1993
INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT)				12200			1.0 69610	Oct	3	.00 78350	many years
50 PERC	10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS			23 5.4 2.2			188 20 4.5			181 19 3.3	



06884400 LITTLE BLUE RIVER NEAR BARNES, KS

LOCATION.--Lat $39^{\circ}46'33"$, long $96^{\circ}51'29"$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ Sec.22, T.3 S., R.5 E., Washington County, Hydrologic Unit 10270207, on right bank at downstream side of bridge on Kansas Highway 15E., 0.4 mi downstream from Malone Creek, 4.5 mi north of Barnes, and at mile 19.2.

DRAINAGE AREA. -- 3,324 mi².

PERIOD OF RECORD.--April 1958 to current year. Published as "at Waterville" April 1958 to September 1960; those prior to April 1958 collected at site 11.5 mi downstream and are considered not equivalent.

GAGE.--Water-stage recorders. Datum of gage is 1,140.06 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

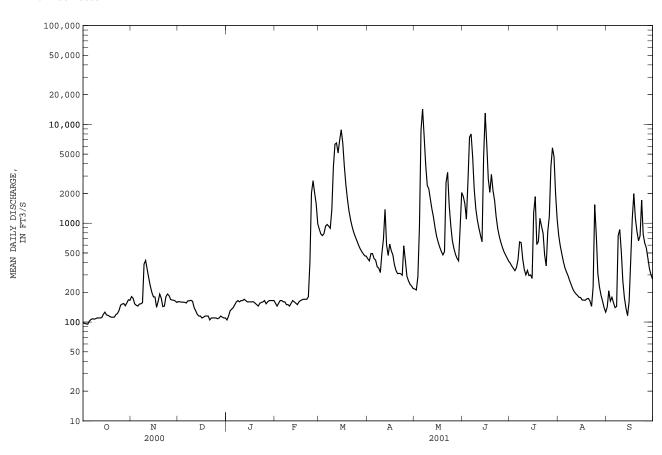
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of $4,500~{\rm ft}^3/{\rm s}$ and maximum (*):

Date	Ti	me	Discharge (ft ³ /s)	e Gag	e height (ft)		Date	Tin	ne	Discharge (ft ³ /s)		height (ft)
Mar 11 Mar 15 May 6	24 12 07	00	8,130 9,100 *15,400		11.34 11.89 14.90		Jun 5 Jun 15 Jul 27	140 060 150	00	11,700 15,000 6,990	1	13.25 14.73 10.65
		DISCHA	ARGE, CUBIC	FEET PE		, WATER YE LY MEAN VA		ER 2000 TO) SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	98 97 96 95 102	181 174 153 148 145	161 160 159 159 158	e105 e115 e130 e135 e140	e155 e145 e155 e165 e165	869 777 749 787 934	436 416 493 493 439	216 211 288 927 8750	1870 1580 1100 2660 7420	394 369 350 331 356	751 589 488 408 353	142 207 163 178 157
6 7 8 9	106 108 107 108 110	152 153 157 386 420	156 164 164 166 162	e150 e160 e165 e160 e165	e160 e160 e150 e150 e145	971 934 889 1370 3710	423 362 351 317 495	14300 7570 3880 2410 2220	8000 4690 2210 1410 1080	429 648 635 436 340	320 293 262 239 216	140 144 748 863 515
11 12 13 14 15	110 110 111 120 126	342 279 231 199 180	e140 e130 e120 e115 e115	e165 e170 e165 e160 e160	e155 e165 e160 e155 e150	6290 6490 5130 6920 8810	696 1380 601 472 614	1740 1380 1140 892 733	892 755 649 4640 13000	300 333 295 300 276	202 193 186 178 177	258 175 138 116 162
16 17 18 19 20	118 117 114 112 112	179 141 162 192 174	e110 e112 e115 e115 e115	e160 e160 e160 e155 e150	e160 e165 e168 e170 e170	6490 3760 2430 1740 1320	528 478 381 333 309	641 570 517 478 515	6390 2790 2050 3120 2140	1280 1860 608 653 1120	167 167 166 172 173	415 1100 1990 1120 826
21 22 23 24 25	112 119 122 131 148	143 145 181 192 185	e105 e110 e110 e110 e110	e145 e155 e158 e160 e165	e170 e180 403 2020 2690	1080 919 808 730 665	311 308 298 591 419	2590 3270 1520 955 672	1710 1170 888 739 643	933 794 477 370 821	163 144 227 1540 767	665 745 1710 769 629
26 27 28 29 30 31	152 154 146 156 168 166	169 167 166 163 158	e108 e110 e115 e112 e110 e110	e153 e160 e165 e165 e165 e165	2030 1570 988 	605 556 520 493 468 464	290 261 241 231 218	557 486 441 416 900 2040	570 516 478 445 414	1170 3720 5790 4710 1980 1100	312 228 188 163 140 126	561 441 346 300 271
MEAN MAX MIN MED AC-FT	121 168 95 112 7440	194 420 141 172 11540	129 166 105 115 7950	154 170 105 160 9490	472 2690 145 165 26220	2215 8810 464 934 136200	440 1380 218 418 26150	2040 14300 211 900 125400	2534 13000 414 1500 150800	1070 5790 276 608 65810	313 1540 126 202 19240	533 1990 116 380 31720

06884400 LITTLE BLUE RIVER NEAR BARNES, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	7	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	583 6989 1974 52.9 1992	346 1526 1997 102 1992	251 676 1974 114 1967	298 1097 1974 90.2 1967	500 1576 1993 129 1992	1045 5436 1979 146 1992	724 3696 1987 150 1981	1144 3985 1995 128 1992	; ;	1278 5343 1984 208 1988	1097 11420 1993 85.7 1991	612 3487 1985 63.4 1991	600 3804 1973 51.5 1991
SUMMARY	STATIST	ICS	FOR 2	2000 CALE	NDAR YEAR	F	FOR 2001 W.	ATER YE	AR		WATER Y	EARS 1959	9 - 2001
HIGHEST LOWEST	ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN			355			854				708 2413 234		1993 1991
				8780 58	Jul 7		14300 95	May	6		46100 24		13 1973
	DAILY MEA	MINIMUM		72	Jun 19 Jun 13		100	Oct Oct	4		28	Aug Aug	4 1964 1 1964
					0 001 13		15400	May	6		53700		12 1973
	MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE						14.9	- 2	6		27.7		12 1973
	INSTANTANEOUS LOW FLOW			057400			95	Oct	4		22	Aug	6 1964
	NNUAL RUNOFF (AC-FT) 0 PERCENT EXCEEDS			257400 576			618000 2000				512700 1350		
	.0 PERCENT EXCEEDS 50 PERCENT EXCEEDS			210			279				268		
90 PERC	ENT EXCE	EDS		96			115				127		



Discharge

Gage height

06885500 BLACK VERMILLION RIVER NEAR FRANKFORT, KS

LOCATION.--Lat $39^{\circ}41^{\circ}03^{\circ}$, long $96^{\circ}26^{\circ}15^{\circ}$, in NE $^{1}/_{4}$ NW $^{1}/_{4}$ sec.29, T.4 S., R.9 E., Marshall County, Hydrologic Unit 10270205, on right bank at downstream side of county highway bridge, 0.2 mi downstream from Robidoux Creek, 2.2 mi southwest of Frankfort, and at mile 19.9.

WATER-DISCHARGE RECORDS

DRAINAGE AREA. -- 410 mi².

PERIOD OF RECORD.--October 1953 to current year. Monthly discharge only for October to December 1953, published in WSP 1730.

GAGE.--Water-stage recorder. Datum of gage is 1,106.91 ft above sea level. Prior to May 13, 1954, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 3, 1948, reached a stage of 30.2 ft, present site and datum, from floodmarks. Flood in June 1951 reached a stage of 28.6 ft, present site and datum, from floodmarks, discharge, 30,400 ft³/s, based on contracted-opening measurement of peak flow.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Gage height

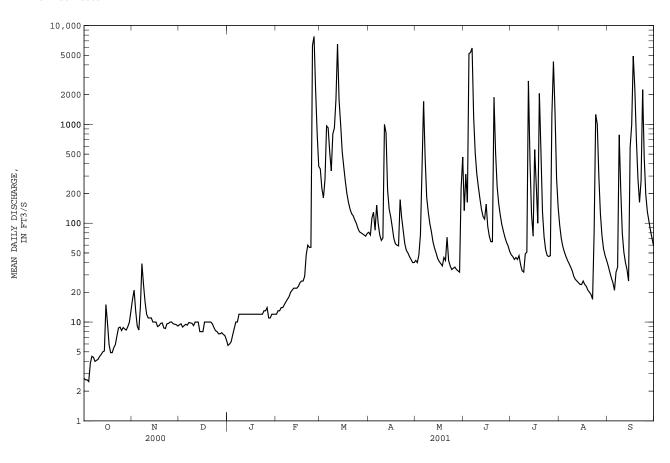
Discharge

Date	Tim	ne	(ft ³ /s)	e Gag	e neight (ft)		Date	Time		(ft ³ /s)		neight (ft)
Feb 25 Mar 12 May 6 Jun 4 Jul 12	001 114 124 203 114	15 15 10	*12,500 8,540 3,070 8,470 4,480		27.07 25.59 16.96 25.56 19.81		Jul 19 Jul 28 Sep 17 Sep 23	0800 1900 1530 1345		3,290 5,970 6,060 4,010	2	7.46 2.41 2.60 8.93
		DISCHA	RGE, CUBI	C FEET PE		WATER YE Y MEAN VA	AR OCTOBER LUES	2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	2.7 2.6 2.6 2.5 3.8	17 21 13 9.1 8.3	9.4 9.6 8.9 9.2 9.5	e5.8 e6.0 e6.3 e7.4 e8.6	e12 e13 e13 e14 e14	354 225 180 280 965	81 76 113 129 85	42 40 48 77 353	134 313 163 5190 5340	48 46 43 45 43	95 70 58 51 46	37 32 28 25 21
6 7 8 9 10	4.5 4.4 4.0 4.1 4.2	14 39 24 16 12	9.3 9.9 9.8 9.7 9.2	e10 e10 e12 e12 e12	e15 e16 e17 e18 e20	925 529 339 799 919	152 99 76 67 71	1710 457 182 129 99	5930 1180 514 317 234	47 38 33 32 49	42 39 36 33 29	32 36 784 220 79
11 12 13 14 15	4.5 4.7 5.0 5.1	11 11 11 10	e10 e10 e10 e8.0 e8.0	e12 e12 e12 e12 e12	e21 e22 e22 e22 e23	1790 6470 1760 999 528	1000 822 218 139 116	82 65 56 50 44	178 138 117 110 156	51 2750 424 123 74	27 26 25 24 24	51 40 34 26 582
16 17 18 19 20	9.7 5.9 4.9 4.9 5.5	10 9.0 9.2 9.7 9.8	e8.0 e10 e10 e10 e10	e12 e12 e12 e12 e12	e25 e26 26 29 48	371 265 199 162 139	91 70 62 60 59	41 39 37 e45 e42	93 74 65 65 1880	556 244 100 2060 536	26 24 23 21 20	989 4910 2310 701 280
21 22 23 24 25	5.9 7.2 8.7 8.9 8.2	8.7 8.6 9.6 9.7	e10 e9.6 e8.8 e8.2 e8.0	12 12 12 13 13	60 57 57 6300 7760	125 119 108 100 89	173 113 84 62 53	e72 42 37 34 35	526 236 158 121 97	129 73 54 47 46	19 17 81 1260 1010	163 269 2250 462 195
26 27 28 29 30 31	8.8 8.5 8.3 9.0 10	10 9.6 9.5 9.4 9.1	e7.6 e7.8 e7.5 e7.3 e6.6	14 e11 e11 e12 e12 e12	2230 797 375 	82 80 78 76 74 79	50 46 43 40 40	36 34 33 32 226 468	83 72 64 59 52	47 1250 4310 1330 284 145	302 125 75 55 47 42	131 105 85 70 59
MEAN MAX MIN AC-FT	6.36 15 2.5 391	12.3 39 8.3 731	8.95 10 6.6 550	11.1 14 5.8 683	645 7760 12 35810	620 6470 74 38100	143 1000 40 8510	151 1710 32 9300	789 5930 52 46930	486 4310 32 29870	122 1260 17 7480	500 4910 21 29760

06885500 BLACK VERMILLION RIVER NEAR FRANKFORT, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	121 1685 1974 .000 1957	91.6 1158 1999 .020 1957	50.2 255 1993 .51 1957	55.4 371 1962 .49 1957	146 662 1969 2.00 1956	248 1413 1979 2.87 1956	220 1750 1999 3.18 1956	320 1873 1995 3.88 1956	325 1431 1999 11.8 1972	280 4575 1993 2.38 1954	675 1 1985 1 .22 .	171 1068 1977 1000 1956
SUMMARY	STATISTI	CS	FOR 2	2000 CALENI	DAR YEAR	FC	OR 2001 WAT	TER YEAR		WATER YEA	RS 1954 - 2	2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN				46.9 2210 1.7	Jul 5 Sep 15		287 7760 2.5	Feb 25 Oct 4		176 812 11.8 28800		
				1.9	Sep 13		3.3 12500 27.07 2.3	Oct 1 Feb 25 Feb 25 Oct 2		38300 32.28	Aug 28 1 May 30 1 Jul 22 1 at ti	.956 .959 .993
ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS				34020 55 20 4.2			208100 532 40 8.3			127700 249 29 4.1		



06885500 BLACK VERMILION RIVER NEAR FRANKFORT, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. -- Water years 1976 to April 1990, 2000 to current year.

 ${\tt REMARKS.--Unpublished \ records \ of \ intermittent \ sediment \ samples \ are \ available \ on \ the \ World \ Wide \ Web \ at \ http://ks.water.usgs.gov/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linea$ nwis. Sediment samples are collected only at selected flow conditions.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		DIS-				SEDI-	SED.						
		CHARGE,	SPE-			MENT,	SUSP.						
		INST.	CIFIC		SEDI-	DIS-	SIEVE	FALL	FALL	FALL	FALL	FALL	FALL
		CUBIC	CON-	TEMPER-	MENT,	CHARGE,	DIAM.						
		FEET	DUCT-	ATURE	SUS-	SUS-	% FINER						
DATE	TIME	PER	ANCE	WATER	PENDED	PENDED	THAN						
		SECOND	(US/CM)	(DEG C)	(MG/L)	(T/DAY)	.062 MM	.002 MM	.004 MM	.008 MM	.016 MM	.031 MM	.062 MM
		(00061)	(00095)	(00010)	(80154)	(80155)	(70331)	(70337)	(70338)	(70339)	(70340)	(70341)	(70342)
MAR													
05	1250	1000	250	1.0	884	2390							
12	0930	7500		1.5	2170	43900	98						
APR													
20	1355	70	608	17.0	84	16							
JUN													
04	1335	5320	184	15.0	3670	52700		64	69	73	82	85	97
JUL													
16	1150	548	368	27.0	3680	5440	96						

	SED.	SED.	SED.	SED.
	SUSP.	SUSP.	SUSP.	SUSP.
	FALL	FALL	FALL	FALL
	DIAM.	DIAM.	DIAM.	DIAM.
	% FINER	% FINER	% FINER	% FINER
DATE	THAN	THAN	THAN	THAN
	.125 MM	.250 MM	.500 MM	1.00 MM
	(70343)	(70344)	(70345)	(70346)
MAR				
05				
12				
APR				
20				
JUN				
04	97	98	100	100
JUL				
16				

06886900 TUTTLE CREEK LAKE NEAR MANHATTAN, KS

LOCATION.--Lat 39°15'16", long 96°36'08", in NW 1 / $_{4}$ NE 1 / $_{4}$ SW 1 / $_{4}$ sec.24, T.9 S., R.7 E., Pottawatomie County, Hydrologic Unit 10270205, on Big Blue River, near right end of dam, 5.0 mi north of Manhattan, and at mile 10.0.

DRAINAGE AREA. -- 9,628 mi².

PERIOD OF RECORD.--March to April 1960, March 1962 to current year. Prior to October 1968, published as "Tuttle Creek Reservoir near Randolph." October 1968 to September 1971 published as "Tuttle Creek Reservoir near Manhattan."

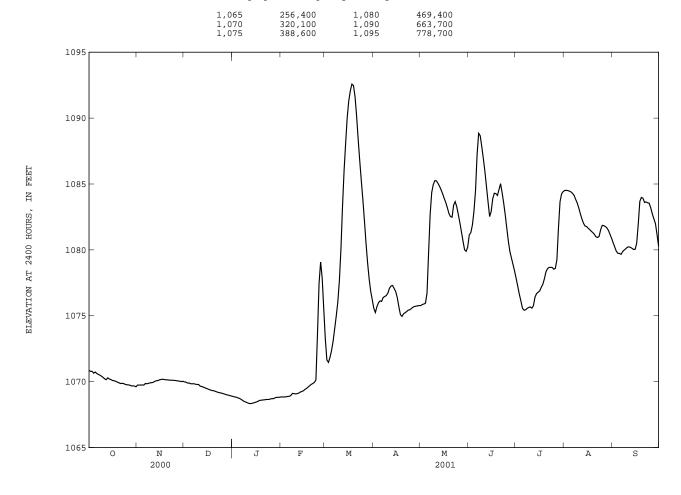
GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers). Prior to July 1, 1968, at site 19.8 mi upstream at same datum.

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Mar. 15, 1962. Conservation pool elevation was first reached on Apr. 30, 1963. Total capacity, 3,186,000 acre-ft consisting of the following: Sedimentation, 211,500 acre-ft below elevation 1,061.0 ft; conservation pool, 177,100 acre-ft between elevations 1,061.0 ft and 1,075.0 ft; flood-control pool, 1,937,000 acre-ft between elevations 1,075.0 ft and 1,136.0 ft; and surcharge pool, 860,100 acre-ft between elevations 1,136.0 ft and 1,150.0 ft. Reservoir is used to store water for flood control. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,137.76 ft July 22, 1993, contents, 2,423,000 acre-ft; minimum elevation since conservation pool was first reached, 1,060.82 ft Jan. 4, 1967, contents, 231,000 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,092.73 ft Mar. 19, contents, 724,900 acre-ft; minimum elevation, 1,068.33 ft Jan. 12, contents, 298,200 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet) (Based on field survey by U.S. Army Corps of Engineers in 1973 revised 1982)



06886900 TUTTLE CREEK LAKE NEAR MANHATTAN, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1070.86	1069.74	1069.98	1068.88	1068.85	1073.25	1075.56	1075.77	1081.14	1077.81	1084.51	1080.52
2	1070.78	1069.74	1069.96	1068.84	1068.83	1071.65	1075.25	1075.86	1081.31	1077.23	1084.52	1080.21
3	1070.78	1069.74	1069.89	1068.83	1068.84	1071.46	1075.70	1075.89	1081.89	1076.63	1084.50	1079.89
4	1070.64	1069.75	1069.90	1068.77	1068.85	1071.84	1075.99	1075.95	1082.93	1076.12	1084.46	1079.74
5	1070.73	1069.74	1069.84	1068.74	1068.88	1072.37	1076.13	1076.71	1084.50	1075.57	1084.40	1079.73
6	1070.62	1069.86	1069.84	1068.67	1068.89	1073.09	1076.09	1079.76	1087.24	1075.42	1084.29	1079.66
7	1070.55	1069.84	1069.84	1068.59	1068.95	1074.02	1076.39	1082.69	1088.85	1075.45	1084.13	1079.86
8	1070.49	1069.87	1069.81	1068.51	1069.11	1074.99	1076.46	1084.35	1088.66	1075.56	1083.83	1079.99
9	1070.41	1069.91	1069.78	1068.46	1069.09	1076.05	1076.54	1084.96	1087.83	1075.63	1083.56	1080.08
10	1070.32	1069.92	1069.79	1068.41	1069.07	1077.67	1076.72	1085.25	1086.93	1075.67	1083.17	1080.20
11	1070.21	1069.95	1069.66	1068.36	1069.09	1080.10	1077.09	1085.24	1085.95	1075.58	1082.74	1080.23
12	1070.15	1070.02	1069.63	1068.33	1069.13	1083.31	1077.26	1085.05	1084.80	1075.76	1082.34	1080.19
13	1070.29	1070.07	1069.59	1068.35	1069.21	1086.01	1077.30	1084.83	1083.65	1076.41	1082.02	1080.12
14	1070.20	1070.08	1069.54	1068.38	1069.25	1088.11	1077.07	1084.55	1082.53	1076.68	1081.81	1080.03
15	1070.16	1070.14	1069.49	1068.42	1069.31	1090.04	1076.83	1084.25	1082.91	1076.79	1081.77	1080.04
16	1070.09	1070.16	1069.44	1068.46	1069.41	1091.32	1076.38	1083.90	1083.88	1076.88	1081.64	1080.51
17	1070.07	1070.19	1069.39	1068.51	1069.49	1092.08	1075.69	1083.59	1084.30	1077.16	1081.54	1081.95
18	1070.03	1070.16	1069.35	1068.58	1069.59	1092.58	1075.09	1083.20	1084.27	1077.38	1081.41	1083.68
19	1069.97	1070.14	1069.32	1068.59	1069.69	1092.47	1074.95	1082.76	1084.13	1077.80	1081.31	1083.98
20	1069.92	1070.14	1069.30	1068.61	1069.79	1091.63	1075.15	1082.53	1084.58	1078.33	1081.17	1083.92
21	1069.86	1070.12	1069.25	1068.62	1069.86	1090.16	1075.23	1082.48	1085.02	1078.57	1080.99	1083.60
22	1069.87	1070.11	1069.21	1068.64	1069.94	1088.39	1075.32	1083.39	1084.34	1078.67	1080.94	1083.64
23	1069.86	1070.11	1069.17	1068.65	1070.13	1086.77	1075.43	1083.66	1083.55	1078.67	1081.03	1083.57
24	1069.80	1070.10	1069.15	1068.65	1073.62	1085.26	1075.45	1083.28	1082.65	1078.67	1081.55	1083.54
25	1069.77	1070.09	1069.12	1068.69	1077.45	1083.81	1075.55	1082.69	1081.64	1078.53	1081.86	1083.18
26 27 28 29 30 31	1069.75 1069.74 1069.68 1069.68 1069.67 1069.61	1070.07 1070.05 1070.04 1070.00 1070.03	1069.08 1069.04 1069.00 1068.98 1068.94 1068.91	1068.71 1068.71 1068.78 1068.81 1068.81 1068.82	1079.08 1077.87 1075.53 	1082.22 1080.54 1079.05 1077.82 1076.86 1076.22	1075.65 1075.70 1075.73 1075.75 1075.78	1082.06 1081.37 1080.66 1080.01 1079.89 1080.21	1080.63 1079.85 1079.36 1078.87 1078.37	1078.60 1079.25 1081.65 1083.65 1084.25 1084.42	1081.84 1081.77 1081.66 1081.46 e1081.16 1080.87	1082.72 1082.35 1081.99 1081.16 1080.28
MEAN	1070.15	1070.00	1069.46	1068.62	1070.60	1081.65	1075.97	1081.83	1083.55	1077.90	1082.40	1081.35
MAX	1070.86	1070.19	1069.98	1068.88	1079.08	1092.58	1077.30	1085.25	1088.85	1084.42	1084.52	1083.98
MIN	1069.61	1069.74	1068.91	1068.33	1068.83	1071.46	1074.95	1075.77	1078.37	1075.42	1080.87	1079.66
(+)	315,000	320,500	305,800	304,600	396,600	407,200	400,400	473,100	441,800	550,700	484,700	474,300
(#)	-17,600	+5,500	-14,700	-1,200	+92,000	+10,600	-6,800	+72,700	-31,300	+108,900	-66,000	-10,400

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

e Estimated

06887000 BIG BLUE RIVER NEAR MANHATTAN, KS

LOCATION.--Lat $39^{\circ}14^{\circ}14^{\circ}$, long $96^{\circ}34^{\circ}16^{\circ}$, in SW $^{1}/_{4}$ NW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.30, T.9 S., R.8 E., Riley County, Hydrologic Unit 10270205, on right bank at downstream side of county highway bridge, 2.5 mi downstream from Tuttle Creek Dam, 4.0 mi north of Manhattan, and at mile 7.5.

DRAINAGE AREA --9.640 mi²

PERIOD OF RECORD.--May to July 1951 (published in WSP 1139), October 1954 to current year. Records for April 1895 to October 1905, published in previous Annual Reports and Water-Supply Papers, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorders. Datum of gage is 988.86 ft above sea level. May 1 to July 31, 1951, nonrecording gage above power dam 1.1 mi upstream at datum 8.34 ft higher. Oct. 1 to Nov. 17, 1954, nonrecording gage and Nov. 18, 1954, to Sept. 30, 1974, recording gage at present site and datum 3.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated since 1962 by Tuttle Creek Lake (station 06886900), 2.5 mi upstream. Discharge may, at times, be affected by backwater from the Kansas River. Satellite telemeter at station.

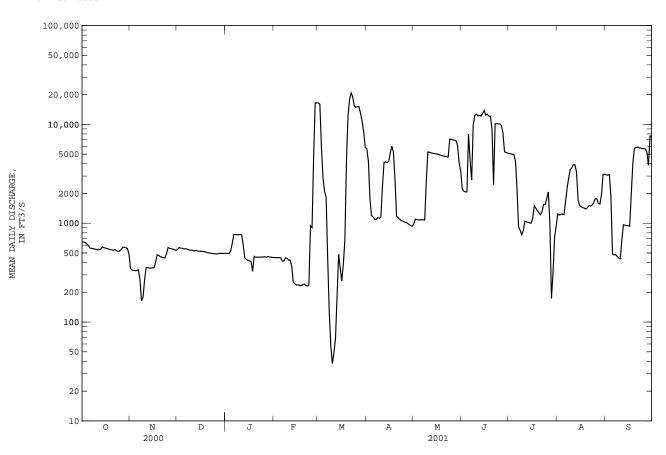
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 31, 1903, reached a stage of 38.85 ft, and flood in June 1941 reached a stage of about 37.1 ft, from floodmarks and information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP e16500 e2220 e16000 e2110 e5810 e2070 e2080 e2880 e2090 e1840 e436 e520 e519 e511 e4820 e4800 e4750 e4710 e4670 e16500 e16500 ___ MEAN MAX MIN

06887000 BIG BLUE RIVER NEAR MANHATTAN, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	1714 13370 1987 63.7 1985	1748 20110 1974 56.6 1988	1461 4969 1974 161 1965	847 3311 1974 106 1970	1596 5586 1973 21.9 1975	2625 12200 1969 48.1 1967	3296 15400 1987 50.8 1967	3707 15210 1987 53.7 1967	4116 16640 1995 91.5 1981	4369 24360 1993 371 1970	2640 23900 1993 308 1976	1825 14770 1993 43.3 1988
SUMMARY	STATIST	ICS	FOR 2	2000 CALEN	NDAR YEAR		FOR 2001	WATER YEA	R	WATER Y	EARS 1963	3 - 2001
HIGHEST LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT	SUMMARY STATISTICS ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW			1050 3200 29 80	Aug 23 Jun 21 Apr 24			Mar 2 Mar 1 Mar Mar 2 56 Mar 2 66 Mar 1	0 7 2 2	2499 9450 790 59500 2.3 2.3 93400 36.0 .2	Sep Sep Jul 4 Jul	1993 1988 24 1993 14 1988 8 1988 12 1951 12 1951 23 1978
ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS			762000 2530 744 162			1978000 7600 971 355			1811000 6510 974 183			



06887500 KANSAS RIVER AT WAMEGO, KS

LOCATION.--Lat 39°11'52", long 96°18'16", in NW $^{1}/_{4}$ SW $^{1}/_{4}$ NE $^{1}/_{4}$ sec.9, T.10 S., R.10 E., Pottawatomie County, Hydrologic Unit 10270102, on left bank at upstream side of bridge on Kansas Highway 99 at Wamego, 3.0 mi downstream from Antelope Creek, and at mile 126.9.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--55,280 mi^2 , approximately, of which a large area is probably noncontributing.

PERIOD OF RECORD. -- January 1919 to current year.

AC-FT

REVISED RECORDS. -- WSP 806: Drainage area. WSP 1310: 1937(M).

GAGE.--Water-stage recorder. Datum of gage is 950.82 ft above sea level. Prior to Aug. 1 1934, nonrecording gage and Aug. 1, 1934, to Sept. 30, 1955, water-stage recorder at present site at datum 3.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by reservoirs in Colorado, Nebraska, and Kansas, and by numerous small diversions for irrigation upstream from station. Satellite telemeter at station.

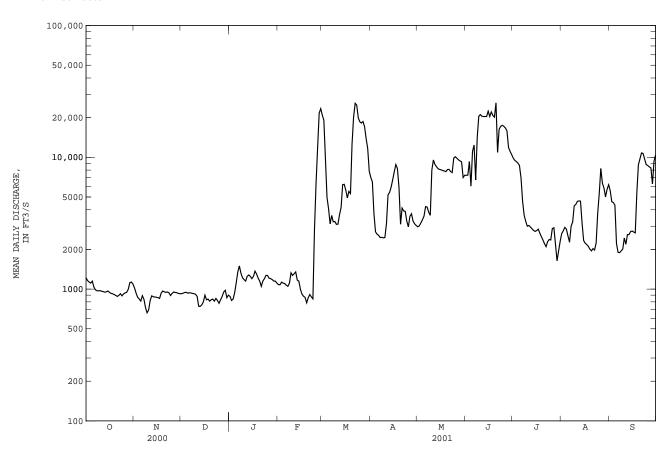
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1903 reached a stage of 29.3 ft, present datum, determined by U.S. Weather Bureau, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT DEC FEB MAY AUG SEP NOV JAN MAR APR JUL e880 e820 e840 e940 e1120 7 e1350 972 2470 14100 e1500 e1320 e1220 e1180 e1150 e740 e1250 1170 4150 20400 2870 e740 e1280 e760 e1250 e800 e1200 e900 e1250 e830 1300 7880 e840 e810 e830 e1150 e840 e1050 e810 17200 e1150 e850 e820 e780 e830 e880 e1200 e950 e980 e1150 ---e860 e1150 MEAN MAX MTN

06887500 KANSAS RIVER AT WAMEGO, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	3991 39030 1974 336 1957	3025 35430 1974 390 1957	2471 14410 1974 384 1957	1983 9735 1974 302 1940	3179 14320 1949 494 1957	4782 23240 1973 465 1967	5975 32710 1987 606 1956	7591 30610 1987 379 1967	10620 64620 1951 1114 1966	9030 98420 1951 747 1936	5386 50300 1993 271 1934	4866 32530 1951 388 1956
SUMMARY	STATIST	ICS	FOR	2000 CALE	NDAR YEAR		FOR 2001	WATER YEAR		WATER YE	ARS 1920	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT ANNUAL	ANNUAL MANNUAL MANNUAL ME DAILY ME SEVEN-DA PEAK FLIPEAK STANEOUS LERUNOFF ()	EAN EAN AN Y MINIMUM OW AGE OW FLOW AC-FT)		2353 13600 661 777	Mar 27 Nov 9 Nov 5		4831 25900 661 777 31100 13. 646 3498000	Jun 20 Nov 9 Nov 5 Jun 20 09 Jun 20 Nov 9		5248 22320 1135 393000 116 171 400000 30.56 73	Dec Oct Jul Jul	1993 1956 13 1951 14 1940 5 1956 13 1951 13 1951 14 1940
50 PERC	ENT EXCE ENT EXCE	EDS		3900 2080 893			11700 2610 880			12500 2370 793		



06887500 KANSAS RIVER AT WAMEGO, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. -- Water years 1970-74, 1999 to current year.

PERIOD OF DAILY RECORD. --

SPECIFIC CONDUCTANCE: October 1969 to September 1974, July 1999 to current year.

PH: July 1999 to current year.
WATER TEMPERATURE: October 1969 to September 1974, July 1999 to current year.

DISSOLVED OXYGEN: July 1999 to current year. TURBIDITY: July 1999 to current year.

INSTRUMENTATION. -- Multiparameter water-quality monitor.

REMARKS.--Records good except those for periods of missing records. Interruptions in record are due to ice conditions or malfunction of the recording instrument or sensors. Instruments used to measure trubidity conform to ISO 7027 standards.

EXTREMES FOR PERIOD OF RECORD .--

SPECIFIC CONDUCTANCE: Maximum, 1,820 microsiemens/cm, Oct. 24, 1999; minimum, 268 microsiemens/cm, Aug. 26, 2001. pH: Maximum, 8.9 standard units, Apr. 29, 1999; minimum, 7.1 standard units, Aug. 26, 2001. WATER TEMPERATURE: Maximum, 33.6 °C, July 5, 2000; minimum, -0.2 °C, Feb. 15, 2001. DISSOLVED OXYGEN: Maximum 18.4 mg/L, Oct. 9, 1999; minimum, 4.9 mg/L, Aug. 26, 2001. TURBIDITY: Maximum, >1,600 NTU, Aug 28, 2001; minimum, 6 NTU, Oct. 18, 1999.

EXTREMES FOR CURRENT YEAR . --

CREMES FOR CURRENT YEAR.-SPECIFIC CONDUCTANCE: Maximum, 1,470 microsiemens/cm, Nov. 9; minimum, 278 microsiemens/cm, Aug. 26.
pH: Maximum, 8.9 standard units, Apr. 8; minimum, 7.1 standard nits, Aug. 26.
WATER TEMPERATURE: Maximum, 33.6 °C, July 30; minimum, -0.2 °C, Feb. 15.
DISSOLVED OXYGEN: Maximum, 17.1 mg/L, Dec. 10; minimum, 4.9 mg/L, Aug. 26.
TURBIDITY: Maximum, >1,600 ntu, Aug. 28; minimum, 8 ntu, Nov. 30.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER	3	N	OVEMBER		D	ECEMBER			JANUARY	
1	993	923	968	1080	1010	1030	1190	1180	1180			
2	1000	990	995	1100	1020	1040	1180	1140	1160			
3	996	990	992	1160	1100	1130	1160	1130	1140			
4	994	980	988	1190	1160	1180	1170	1120	1140			
5	1020	929	977	1220	1190	1210	1140	1120	1130			
6	1070	1000	1040	1210	1100	1130	1150	1120	1140			
7	1100	1070	1090	1180	1130	1150	1150	1120	1130			
8			e1100	1360	1180	1250	1160	1130	1140			
9				1470	1360	1420	1160	1130	1140			
10				1440	1280	1370						
11	1130	1120	1130	1280	1170	1230						
12	1130	1110	1120	1170	1150	1160						
13	1140	1110	1120	1180	1160	1170						
14	1120	1080	1100	1180	1160	1170						
15	1090	1080	1090	1180	1160	1170						
13	1000	1000	1000	1100	1100	1170						
16	1090	1060	1080	1210	1180	1210						
17	1070	1050	1060	1240	1210	1220						
18	1070	1050	1060	1220	1130	1180						
19	1110	1070	1090	1140	1120	1130				1160	1020	1090
20	1130	1110	1120	1160	1130	1150				1080	997	1030
21	1130	1110	1120	1170	1140	1150				1030	999	1010
22	1120	1080	1100	1170	1140	1160				1050	989	1020
23	1090	1070	1080	1170	1150	1160				1020	989	1000
24	1110	1070	1100	1150	1110	1130				1080	1000	1040
25	1120	1090	1100	1110	1030	1070				1170	1080	1140
26	1150	1070	1100	1080	1030	1050				1180	1080	1130
27	1150	1100	1120	1120	1080	1110				1180	1080	1130
28	1130	1110	1120	1140	1120	1130				1090	1020	1060
29	1140	1110	1120	1160	1140	1150				1100	1020	1070
30	1160	1140	1150	1190	1160	1170				1100	1060	1080
31	1160	1070	1110							1100	1070	1090
31		1370								1100	2070	1000
MONTH	1160	923	1080	1470	1010	1170	1190	1120	1140	1180	989	1070

06887500 KANSAS RIVER AT WAMEGO, KS--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

										IO SEFIEM		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY	?		MARCH			APRIL			MAY	
1	1120 1160	1070	1090 1140	557 533	524 494 462	542 514	458	444 455 489	451 462	834	799	818
2	1180	1120 1120	1150	499	462	481	633	489	584	839 825	821 772	829 800
4 5	1140 1140	1120 1050	1130 1090	520 547	461 517	502 530	789 795	633 789	726 791	798 803	772 771	789 784
6	1070			690	547	623	805	794	798	771	683	736
7 8	1160	1070	1050 1120 1120 1060	726	651	683 751	821	803 799	812	765	692 737	726
9	1160 1100	1060 1020	1060	762 776	726 757	767	823 817	804	813 811	794 804	774	767 793
10	1020	990	998	792	775	784	817	793	809	796	524	588
11 12	1100 1060	993 992 1020	1050 1020	791 751	743 658	775 726	809 769	691 527	758 590	590 510	510 449	560 471
13	1120	1020	1070	800	659	740	573	540	550	467	446	454
14 15	1240 1310	1120 1240	1180 1270	772 640	593 569	695 597	619 571	531 516	585 540	470 487	450 469	460 476
16	1370	1210	1300	622	594	605	542	489	523	489	478	483
17	1300	1150	1300 1240 1200 1210	625	602	616	489	452	469 456	495	487 490	491 510
18 19	1230 1240	1170 1180	1210	658 538	538 437	609 464	471 490	446 456	476	523 538	512	521
20	1230	1190	1210	437	348	367	659	478	599	531	511	520
21 22	1270 1270	1200 1250	1260 1260 1230 939 430	363 359	342 338	350 349	650 748	527 551	596 617	540 540	518 528	529
23	1260	1150	1230	370	358	361	793	585	704	531	512	533 525
24 25	1160 745	516 328	939 430	392 372	367 364	378 369	658 659	585 640	634 647	512 476	462 465	473 470
26	745	364	508	368	361	365	855	622	702	470	452	461
27	544	356	481	367	356	364	837	566	686	452	439	445
28 29	557 	544	551 	384 383	356 366	365 374	656 732	565 656	606 696	446 444	437 435	440 439
30 31				397 448	375 397	380 432	799 	732	766 	520 763	435 503	486 556
	1370	328	1050	800	338	531	855	444	642	839	435	578
MONTH	1370	320	1050	800	330	231	655	444	042	039	433	576
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY			MIN AUGUST	MEAN	MAX	MIN SEPTEMBI	
1	908	JUNE 467			JULY 500			AUGUST	767	481	SEPTEMBI	ER 474
1 2	908 580	JUNE 467 481			JULY 500 517			AUGUST	767 772	481 476	SEPTEMBI 466 464	ER 474 468 497
1 2 3 4	908 580 517 887	JUNE 467 481 433 517	580 519 472 751	571 567 557 552	JULY 500 517 520 526			AUGUST 688 680 683 565	767 772 710 617	481 476 517 527	SEPTEMBI 466 464 476 517	474 468 497 524
1 2 3 4 5	908 580 517 887 704	JUNE 467 481 433 517 394	580 519 472 751 474	571 567 557 552 548	JULY 500 517 520 526 522	541 546 539 539 532	912 858 754 706 568	AUGUST 688 680 683 565 529	767 772 710 617 547	481 476 517 527 732	SEPTEMBE 466 464 476 517 527	474 468 497 524 640
1 2 3 4	908 580 517 887 704	JUNE 467 481 433 517 394	580 519 472 751 474	571 567 557 552 548	JULY 500 517 520 526 522 529	541 546 539 539 532	912 858 754 706 568	AUGUST 688 680 683 565 529 549	767 772 710 617 547	481 476 517 527 732	SEPTEMBE 466 464 476 517 527	474 468 497 524 640
1 2 3 4 5 6 7 8	908 580 517 887 704 449 730 729	JUNE 467 481 433 517 394 384 449 417	580 519 472 751 474	571 567 557 552 548	JULY 500 517 520 526 522 529 624 828	541 546 539 539 532 594 769 850	912 858 754 706 568 597 607 561	AUGUST 688 680 683 565 529 549 523 542	767 772 710 617 547 569 553 553	481 476 517 527 732	SEPTEMBE 466 464 476 517 527	474 468 497 524 640 760 809 807
1 2 3 4 5	908 580 517 887 704 449 730	JUNE 467 481 433 517 394 384 449	580 519 472 751 474	571 567 557 552 548	JULY 500 517 520 526 522 529 624	541 546 539 539 532 594 769	912 858 754 706 568 597 607	AUGUST 688 680 683 565 529 549 523	767 772 710 617 547 569 553	481 476 517 527	SEPTEMBE 466 464 476 517 527	474 468 497 524 640 760 809
1 2 3 4 5 6 7 8 9	908 580 517 887 704 449 730 729 436 434	JUNE 467 481 433 517 394 384 449 417 415 391	580 519 472 751 474 401 601 481 424 407	571 567 557 552 548 624 838 885 907 905	JULY 500 517 520 526 522 529 624 828 884 880	541 546 539 539 532 594 769 850 898 895	912 858 754 706 568 597 607 561 563 488	AUGUST 688 680 683 565 529 549 523 542 487 456	767 772 710 617 547 569 553 553 506 474	481 476 517 527 732	\$EPTEMBI 466 464 476 517 527 732 777 765 777 903 814	474 468 497 524 640 760 809 807 831
1 2 3 4 5 6 7 8 9	908 580 517 887 704 449 730 729 436 434	JUNE 467 481 433 517 394 384 449 417 415 391	580 519 472 751 474 401 601 481 424 407	571 567 557 552 548 624 838 885 907 905	JULY 500 517 520 526 522 529 624 828 884 880	541 546 539 539 532 594 769 850 898 895	912 858 754 706 568 597 607 561 563 488	AUGUST 688 680 683 565 529 549 523 542 487 456	767 772 710 617 547 569 553 553 506 474	481 476 517 527 732 777 830 832 937 1130	466 464 476 517 527 732 777 765 777 903 814 727	474 468 497 524 640 760 809 807 831 1010 847 778
1 2 3 4 5 6 7 8 9 10 11 12 13 14	908 580 517 887 704 449 730 729 436 434 403 397 418 429	JUNE 467 481 433 517 394 384 449 417 415 391 390 361 375 379	580 519 472 751 474 401 601 481 424 407 397 381 389 412	571 567 557 552 548 624 838 885 907 905 894 810 793	JULY 500 517 520 526 522 529 624 828 884 880 808 789 785 781	541 546 539 539 532 594 769 850 898 895 848 797 789	912 858 754 706 568 597 607 561 563 488 479 487 487 599	AUGUST 688 680 683 565 529 549 523 542 487 456 444 470 456 477	767 772 710 617 547 569 553 553 506 474 460 478 478 475	481 476 517 527 732 777 830 832 937 1130 903 856 738	\$\frac{466}{464}\$ \\ \frac{476}{517}\$ \frac{527}{777}\$ \tag{732}{777}\$ \tag{765}{765}\$ \tag{777}{903}\$ \tag{814}{727}\$ \tag{715}{727}\$	474 468 497 524 640 760 809 807 831 1010 847 778 728 806
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	908 580 517 704 449 730 729 436 434 403 397 418	JUNE 467 481 433 517 394 384 449 417 415 391 390 361 375	580 519 472 751 474 401 601 481 424 407 397 381 389	571 567 557 552 548 624 838 885 907 905 894 810 793 793 783	JULY 500 517 520 526 522 529 624 828 884 880 808 789 785 781 765	541 546 539 539 532 594 769 850 898 895 848 797 789 788 775	912 858 754 706 568 597 607 561 563 488 479 487 599 673	AUGUST 688 680 683 565 529 549 523 542 487 456 444 470 456 477 599	767 772 710 617 547 569 553 553 506 474 460 478 475 540 647	481 476 517 527 732 777 830 832 937 1130 903 856 738 852 946	\$EPTEMBI 466 464 476 517 527 732 777 765 777 903 814 727 715	474 468 497 524 640 760 809 807 831 1010 847 778 728 806 900
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	908 580 517 887 704 449 730 729 436 434 403 397 418 429	JUNE 467 481 433 517 394 384 449 417 415 391 390 361 375 379	580 519 472 751 474 401 601 481 424 407 397 381 389 412	571 567 557 552 548 624 838 885 907 905 894 810 793 783 783	JULY 500 517 520 526 522 529 624 828 884 880 808 789 785 781 765	541 546 539 539 532 594 769 850 898 895 848 797 789 788 775	912 858 754 706 568 597 607 561 563 488 479 487 487 599 673	AUGUST 688 680 683 565 529 549 523 542 487 456 444 470 456 477 599	767 772 710 617 547 569 553 553 506 474 460 478 478 475 540 647	481 476 517 527 732 777 830 832 937 1130 903 856 738 852 946	\$\frac{466}{464} \\ 476 \\ 517 \\ 527 \\ 732 \\ 777 \\ 765 \\ 777 \\ 903 \\ 814 \\ 727 \\ 715 \\ 727 \\ 840 \\ 815	474 468 497 524 640 760 809 807 831 1010 847 778 728 806 900
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	908 580 517 887 704 449 730 729 436 434 403 397 418 429	JUNE 467 481 433 517 394 384 449 417 415 391 390 361 375 379	580 519 472 751 474 401 601 481 424 407 397 381 389 412 	571 567 557 552 548 624 838 885 907 905 894 810 793 793 783 769 784 754	JULY 500 517 520 526 522 529 624 828 884 880 808 785 781 765 723 680 666	541 546 539 539 532 594 769 850 898 895 848 797 789 788 775 750 744 708	912 858 754 706 568 597 607 561 563 488 479 487 487 599 673 696 761 775	AUGUST 688 680 683 565 529 549 523 542 487 456 444 470 456 477 599 673 696 761	767 772 710 617 547 569 553 553 506 474 460 478 475 540 647	481 476 517 527 732 777 830 832 937 1130 903 856 738 852 946	\$EPTEMBI 466 464 476 517 527 732 777 765 777 903 814 727 715 727 840 815 671 459	474 468 497 524 640 760 809 807 831 1010 847 778 728 806 900 897 23
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	908 580 517 887 704 449 730 729 436 434 403 397 418 429	JUNE 467 481 433 517 394 384 449 417 415 391 390 361 375 379	580 519 472 751 474 401 601 481 424 407 397 381 389 412 	571 567 557 552 548 624 838 885 907 905 894 810 793 793 793 783	JULY 500 517 520 526 522 529 624 828 884 880 808 789 785 781 765	541 546 539 539 532 594 769 850 898 895 848 797 789 788 775	912 858 754 706 568 597 607 561 563 488 479 487 487 487 673	AUGUST 688 680 683 565 529 549 523 542 487 456 444 470 456 477 599 673 696	767 772 710 617 547 569 553 506 474 460 478 475 540 647	481 476 517 527 732 777 830 832 937 1130 903 856 738 852 946	\$EPTEMBIR 466 464 476 517 527 732 777 765 777 903 814 727 715 727 840 815 671	474 468 497 524 640 760 809 807 831 1010 847 728 806 900 849 9723
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	908 580 517 887 704 449 730 729 436 434 403 397 418 429 495	JUNE 467 481 433 517 394 384 449 417 415 391 390 361 375 379 435	580 519 472 751 474 401 601 481 424 407 397 381 389 412 473	571 567 557 552 548 624 838 885 907 905 894 810 793 793 783 769 784 769 791	JULY 500 517 520 526 522 529 624 828 84 880 808 785 781 765 723 680 666 754 767	541 546 539 539 532 594 769 850 898 895 848 797 789 788 775 750 744 708 764 782	912 858 754 706 568 597 607 561 563 488 479 487 487 599 673 696 761 775 775 782	AUGUST 688 680 683 565 529 549 523 542 487 456 444 470 456 477 599 673 696 761 749 753	767 772 710 617 547 569 553 553 506 474 460 478 475 540 647 686 768 760 765	481 476 517 527 732 777 830 832 937 1130 903 856 738 852 946 895 815 686 502	\$\frac{466}{464} \\ 466 \\ 464 \\ 476 \\ 517 \\ 527 \\ 732 \\ 777 \\ 765 \\ 777 \\ 903 \\ 814 \\ 727 \\ 715 \\ 727 \\ 840 \\ 815 \\ 671 \\ 459 \\ \\ \\	474 468 497 524 640 760 809 807 831 1010 847 778 728 806 900 907 528 e460
1 2 3 4 4 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	908 580 517 887 704 449 730 729 436 434 403 397 418 429 495	JUNE 467 481 433 517 394 384 449 417 415 391 390 361 375 379 435 439 544	580 519 472 751 474 401 601 481 424 407 397 381 389 412 473 727 660	571 567 557 552 548 624 838 885 907 905 894 810 793 783 769 784 754 769 791	JULY 500 517 520 526 522 529 624 828 884 880 808 789 785 723 680 666 754 767	541 546 539 539 532 594 769 850 898 895 848 797 789 788 775 750 744 708 764 782	912 858 754 706 568 597 607 561 563 488 479 487 487 487 599 673 696 761 775 775 775 782	AUGUST 688 680 683 565 529 549 523 542 487 456 444 470 456 477 599 673 696 761 749 753 760 762	767 772 710 617 547 569 553 553 553 6474 460 478 475 647 686 726 768 760 765	481 476 517 527 732 777 830 832 937 1130 903 856 738 852 946 895 815 686 502	\$\$\text{466}\$ 466 464 476 517 527 732 777 765 777 903 814 727 715 727 840 815 671 459 374	474 468 497 524 640 760 809 807 831 1010 847 778 728 806 900 849 723 528 e460 413
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	908 580 517 887 704 449 730 729 436 434 403 397 418 429 495 1030 905 576 565	JUNE 467 481 433 517 394 384 449 417 415 391 390 361 375 379 435	580 519 472 751 474 401 601 481 424 407 397 381 389 412 473 727 660 561 543	571 567 557 552 548 624 838 885 907 905 894 810 793 783 783 769 784 754 769 791	JULY 500 517 520 526 522 529 624 828 884 880 808 789 785 781 765 723 680 666 754 767 791 805 733	541 546 539 539 532 594 769 850 898 895 848 797 788 775 750 744 708 764 782 802 808 777 736	912 858 754 706 568 597 607 561 563 488 479 487 487 759 673 696 761 775 782 788 772 763 710	AUGUST 688 680 683 565 529 549 523 542 487 456 444 470 456 477 599 673 696 761 749 753 760 762 613 462	767 772 710 617 547 569 553 553 506 474 460 478 475 540 647 686 726 768 760 765	481 476 517 732 777 830 832 937 1130 903 856 738 852 946 895 815 686 502 	\$\frac{466}{464}\$ \\ \frac{466}{517}\$ \frac{527}{527}\$ \tag{732}{777}\$ \tag{765}{777}\$ \tag{903}\$ \tag{814}\$ \tag{727}\$ \tag{715}\$ \tag{727}\$ \tag{840}\$ \tag{815}\$ \tag{671}\$ \tag{459}\$ \$ \$ \$ \tag{374}\$ \tag{366}\$ \tag{396}\$	474 468 497 524 640 760 809 807 831 1010 847 778 728 806 900 849 723 528 6460
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	908 580 517 887 704 449 730 729 436 434 403 397 418 429 495 1030 905 576	JUNE 467 481 433 517 394 384 449 417 415 391 390 361 375 379 435 439 544 551	580 519 472 751 474 401 601 481 424 407 397 381 389 412 473 727 660 561	571 567 557 552 548 624 838 885 907 905 894 810 793 793 783 769 791 806 812 811	JULY 500 517 520 526 522 529 624 828 884 880 808 785 781 765 723 680 666 754 767	541 546 539 539 532 594 769 850 898 895 848 797 789 788 775 750 744 708 764 782 802 808 777	912 858 754 706 568 597 607 561 563 488 479 487 487 599 673 696 775 775 775 775 7782	AUGUST 688 680 683 565 529 549 523 542 487 456 444 470 456 477 599 673 696 761 749 753 760 760 762 613	767 772 710 617 547 569 553 506 474 460 478 475 540 647 686 768 760 765	481 476 517 527 732 777 830 832 937 1130 903 856 738 852 946 895 815 686 502 	\$\frac{466}{464} \\ 466 \\ 464 \\ 476 \\ 517 \\ 527 \\ 732 \\ 777 \\ 765 \\ 777 \\ 903 \\ 814 \\ 727 \\ 715 \\ 727 \\ 840 \\ 815 \\ 671 \\ 459 \\ \\ \\ \\ 366	474 468 497 524 640 760 809 807 831 1010 847 778 728 806 900 849 723 528 e460 413 385
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	908 580 517 887 704 449 730 729 436 434 403 397 418 429 495 1030 905 576 565 545	JUNE 467 481 433 517 394 384 449 417 415 391 390 361 375 379 435 439 544 551 521 516	580 519 472 751 474 401 601 481 424 407 397 381 389 412 473 727 660 561 543 527	571 567 557 552 548 624 838 885 907 905 894 810 793 783 783 769 784 754 769 791 806 812 811 743 750	JULY 500 517 520 526 522 529 624 828 884 880 808 789 785 781 765 723 680 666 754 767 791 805 733 740 659	541 546 539 539 532 594 769 850 898 895 848 797 788 775 750 744 708 764 782 802 808 777 736 745	912 858 754 706 568 597 607 561 563 488 479 487 487 759 673 696 761 775 775 782 788 772 763 710 728	AUGUST 688 680 683 565 529 549 523 542 487 456 444 470 456 477 599 673 696 761 749 753 760 762 613 462 447	767 772 710 617 547 569 553 553 506 474 460 478 475 540 647 686 726 766 773 767 737 595 601	481 476 517 527 732 777 830 832 937 1130 903 856 738 852 946 895 815 686 686 6502 465 398 407 420	\$\frac{466}{464} \\ 466 \\ 467 \\ 467 \\ 467 \\ 732 \\ 777 \\ 765 \\ 777 \\ 903 \\ 814 \\ 727 \\ 715 \\ 727 \\ 840 \\ 815 \\ 671 \\ 459 \\ \\ \\ 374 \\ 366 \\ 396 \\ 405 \\ 420	474 468 497 524 640 760 809 807 831 1010 847 778 728 806 900 849 723 528 e460 413 385 403 409
1 2 3 3 4 4 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	908 580 517 887 704 449 730 729 436 434 403 397 418 429 495 1030 905 576 565 545	JUNE 467 481 433 517 394 384 449 417 415 391 390 361 375 379 435 439 544 551 521 516 516 516 549 569	580 519 472 751 474 401 601 481 424 407 397 381 389 412 473 727 660 561 543 527	571 567 557 552 548 624 838 885 907 905 894 810 793 793 783 769 784 769 791 806 811 743 750	JULY 500 517 520 526 522 529 624 828 884 880 808 789 785 781 765 723 680 666 754 767 791 805 736 733 740 659 635 617	541 546 539 539 532 594 769 850 898 895 848 797 789 788 775 750 744 708 764 782 802 808 777 736 456 4681 822	912 858 754 706 568 597 607 561 563 488 479 487 487 487 775 775 775 775 775 772 782 788 772 763 710 728	AUGUST 688 680 683 565 529 549 523 542 487 456 444 470 456 477 599 673 696 761 749 753 760 762 613 462 447 278 366 412	767 772 710 617 547 569 553 553 506 474 460 478 475 540 686 768 768 765 773 767 737 595 601 389 425	481 476 517 527 732 777 830 832 937 1130 903 856 738 852 946 895 815 686 502 465 398 407 420 438 442 532	\$\$\text{466}\$ 466 464 476 517 527 732 777 765 777 903 \$\$14 727 715 727 840 \$\$15 671 459 374 366 396 405 420 432 440	474 468 497 524 640 760 809 807 831 1010 847 778 728 806 900 849 723 528 e460 413 385 403 409 432 437 467
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	908 580 517 887 704 449 730 729 436 434 403 397 418 429 495 1030 905 5765 545 559 579	JUNE 467 481 433 517 394 384 449 417 415 391 390 361 375 379 435 439 544 551 516 516 549	580 519 472 751 474 401 601 481 424 407 397 381 389 412 473 727 660 561 543 527	571 567 557 552 548 624 838 885 907 905 894 810 793 783 783 769 784 754 769 791 806 812 811 743 750	JULY 500 517 520 526 522 529 624 828 884 880 808 789 785 781 765 723 680 666 754 767 791 805 733 740 659 635 617 793	541 546 539 539 532 594 769 850 898 895 848 797 788 775 750 744 708 764 782 802 808 777 736 745 694 681 822 912	912 858 754 706 568 597 607 561 563 488 479 487 487 759 673 696 761 775 775 782 788 772 763 710 728 606 561	AUGUST 688 680 683 565 529 549 523 542 487 456 444 470 456 477 599 673 696 761 749 753 760 762 613 462 447 278 366 447	767 772 710 617 547 569 553 553 506 474 460 478 475 540 647 686 726 768 760 765 773 767 737 595 601 389 425 460	481 476 517 732 777 830 832 937 1130 903 856 738 852 946 895 815 686 502 465 398 407 420	\$\frac{466}{464} \\ 466 \\ 467 \\ 466 \\ 476 \\ 517 \\ 527 \\ 7322 \\ 7777 \\ 765 \\ 7777 \\ 903 \\ 814 \\ 727 \\ 840 \\ 815 \\ 671 \\ 459 \\ \\ \\ 374 \\ 366 \\ 396 \\ 405 \\ 420 \\ 432 \\ 432 \\ 440 \\ 407 \\ 407	474 468 497 524 640 760 809 807 831 1010 847 778 728 806 900 849 723 528 e460 413 385 403 409
1 2 3 3 4 4 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	908 580 517 887 704 449 730 436 434 403 397 418 429 495 1030 905 576 555 545	JUNE 467 481 433 517 394 384 449 417 415 391 390 361 375 379 435 439 544 551 521 516 516 549 569	580 519 472 751 474 401 601 481 424 407 397 381 389 412 473 727 660 561 543 527 534 565 646 594	571 567 557 552 548 624 838 885 907 905 894 810 793 793 783 769 784 769 791 806 811 743 750	JULY 500 517 520 526 522 529 624 828 884 880 808 789 785 781 765 723 680 666 754 767 791 805 736 733 740 659 635 617	541 546 539 539 532 594 769 850 898 895 848 797 789 788 775 750 744 708 764 782 802 808 777 736 456 4681 822	912 858 754 706 568 597 607 561 563 488 479 487 487 487 775 775 775 775 775 772 782 788 772 763 710 728	AUGUST 688 680 683 565 529 549 523 542 487 456 444 470 456 477 599 673 696 761 749 753 760 762 613 462 447 278 366 412	767 772 710 617 547 569 553 553 506 474 460 478 475 540 686 768 768 765 773 767 737 595 601 389 425	481 476 517 527 732 777 830 832 937 1130 903 856 738 852 946 895 815 686 6502 465 398 407 420 438 442 532 575	\$\$\text{466}\$ 466 464 476 517 527 732 777 765 777 903 \$\$14 727 715 727 840 \$\$15 671 459 374 366 396 405 420 432 440	474 468 497 524 640 760 809 807 831 1010 847 778 728 806 900 849 723 528 e460 413 385 403 409 432 437 467
1 2 3 4 4 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 9 20 21 22 23 24 25 26 27 28 29 30	908 580 517 887 704 449 730 729 436 434 403 397 418 429 495 1030 905 5765 545 559 579 685 636 600	JUNE 467 481 433 517 394 384 449 417 415 391 390 361 375 379 435 439 544 551 516 516 549 569 567 526	580 519 472 751 474 401 601 424 407 397 381 389 412 473 727 660 561 543 527 534 565 646 594 565	571 567 557 552 548 624 838 885 907 905 894 810 793 783 783 769 784 754 759 791 806 812 811 743 750 742 726 1020 996 9070	JULY 500 517 520 526 522 529 624 828 884 880 808 789 785 781 765 723 680 666 754 767 791 805 736 736 737 740 659 635 617 793 955	541 546 539 539 532 594 769 850 898 895 848 797 788 775 750 744 708 764 782 802 808 777 736 745	912 858 754 706 568 597 607 561 563 488 479 487 487 487 775 775 782 788 772 763 710 728 606 561 547 543	AUGUST 688 680 683 565 529 549 523 487 456 444 470 456 477 599 673 696 761 749 753 760 762 613 462 447 278 366 412 442 4459	767 772 710 617 547 569 553 553 506 474 460 478 475 540 647 686 726 768 760 765 773 767 737 595 601 389 425 460 460 465 501	481 476 517 732 777 830 832 937 1130 903 856 738 852 946 895 815 686 502 465 398 407 420 438 442 532 575 409	\$\$\text{466}\$ 466 464 476 517 527 732 777 765 777 903 814 727 715 727 840 815 671 459 374 366 396 405 420 432 440 407 402	474 468 497 524 640 760 809 807 831 1010 847 778 866 900 849 723 528 e460 413 385 403 409
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 31 31 31 31 31 31 31 31 31 31 31 31	908 580 517 887 704 449 730 436 434 403 397 418 429 495 1030 905 576 565 545 559 579 685 636 600 	JUNE 467 481 433 517 394 384 449 417 415 391 390 361 375 379 435 439 544 551 521 516 516 549 567 526	580 519 472 751 474 401 601 481 424 407 397 381 389 412 473 727 660 561 543 527 534 565 694 565 	571 567 557 552 548 624 838 885 907 905 894 810 793 783 783 769 791 806 812 811 743 750 742 726 1020 996 1070 1200	JULY 500 517 520 526 522 529 624 828 884 880 808 789 785 781 765 723 680 666 754 767 791 805 736 733 740 659 635 617 793 955 912	541 546 539 539 532 594 769 850 898 895 848 797 788 775 750 744 708 764 782 802 808 777 736 745 694 681 822 912 1000 1030	912 858 754 706 568 597 607 561 563 488 479 487 487 7599 673 696 761 775 775 782 788 772 763 710 728 606 561 561 563 488 772 788 772 788 772 788 772 788 772 788 772 788 772 788 772 788 772 788 788	AUGUST 688 680 683 565 529 549 523 542 487 456 444 470 456 477 599 673 696 761 749 753 760 762 613 462 447 278 366 6113 462 447 278 366 412 442 459 463	767 772 710 617 547 569 553 553 506 474 460 478 475 540 647 686 726 768 767 737 767 737 7595 601 389 425 460 465 501 467	481 476 517 527 732 777 830 832 937 1130 903 856 738 852 946 895 815 686 502 465 398 407 420 438 442 532 575 409 	\$\text{466} \\ 466 \\ 464 \\ 476 \\ 517 \\ 527 \\ 732 \\ 777 \\ 765 \\ 777 \\ 903 \\ 814 \\ 727 \\ 840 \\ 815 \\ 671 \\ 459 \\ \\ 374 \\ 366 \\ 396 \\ 405 \\ 420 \\ 432 \\ 440 \\ 407 \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 403 \\ 407 \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 403 \\ 407 \\ 402 \\ \\ 402 \\ \\ 402 \\ \\ 403 \\ 407 \\ 402 \\ \\ 402 \\ \\ 403 \\ 407 \\ 402 \\ \\ 402 \\ \\ 403 \\ 407 \\ 402 \\ \\ 408 \\ 407 \\ 402 \\ \\ \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 408 \\ 4	474 468 497 524 640 760 809 807 831 1010 847 778 728 806 900 849 723 528 e460 413 3355 403 409 432 437 467 439 405

e Estimated

06887500 KANSAS RIVER AT WAMEGO, KS--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY		PH,	WATER,	WHOLE,	FIELD, STA	INDARD UN	IITS, WAT	ER YEAR OC	POBER 20	100 TO SEE	TEMBER 200	1	
1	DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
2			OCTOBE	R		NOVEMBER	2	I	DECEMBER	1		JANUAR	Y
3 8.6 8.2 8.4 8.6 8.2 8.4 8.5 8.6 8.2 8.4 8.5 8.2 8.3													
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122 8.6 8.2 8.4 8.4 8.2 8.3 8.2 8.3													
13 8.6 8.3 8.5 8.3 8.5 8.3 8.2 8.3 15 8.6 8.2 8.4 8.4 8.4 8.2 8.3 17 8.6 8.6 8.2 8.5 8.4 8.4 8.3 8.3 8.2 18 8.6 8.2 8.5 8.4 8.4 8.3 8.3 8.3 17 8.6 8.6 8.2 8.5 8.4 8.4 8.3 8.3 8.3 19 8.7 8.2 8.4 8.4 8.4 8.3 8.3 8.5 8.4 8.4 18 8.6 8.2 8.5 8.4 8.4 8.3 8.3 8.1 8.3 8.3 20 8.6 8.2 8.4 8.4 8.4 8.3 8.3 8.4 8.3 8.4 21 8.6 8.2 8.4 8.4 8.4 8.3 8.3 8.4 8.3 8.4 21 8.6 8.2 8.4 8.4 8.4 8.3 8.3 8.4 8.3 8.4 21 8.6 8.2 8.4 8.3 8.3 8.4 8.4 8.3 8.3 8.4 22 8.5 8.1 8.3 8.3 8.2 8.3 8.4 8.3 8.3 23 8.6 8.1 8.3 8.3 8.2 8.3 8.4 8.3 8.3 25 8.5 8.5 8.4 8.3 8.4 8.2 8.3 26 8.6 8.1 8.3 8.4 8.2 8.3 8.4 8.3 8.3 27 8.6 8.1 8.4 8.4 8.5 8.2 8.4 8.3 8.3 27 8.6 8.1 8.4 8.4 8.5 8.2 8.4 8.3 8.3 27 8.6 8.1 8.4 8.4 8.5 8.2 8.4 8.3 8.3 28 8.5 8.5 8.2 8.4 8.4 8.4 8.3 8.3 8.3 8.4 8.3 8.3 29 8.6 8.1 8.4 8.5 8.2 8.4 8.3 8.3 8.3 8.4 8.3 8.3 21 8.6 8.1 8.4 8.5 8.2 8.4 8.3 8.3 8.3 8.4 8.3 8.3 21 8.6 8.1 8.4 8.5 8.2 8.4 8.3 8.3 8.3 8.4 8.3 8.3 22 8.6 8.6 8.1 8.4 8.5 8.2 8.4 8.4 8.4 8.3 8.3 23 8.6 8.1 8.4 8.3 8.3 8.4 8.2 8.3 24 8.6 8.1 8.4 8.3 8.3 8.2 8.3 8.4 8.3 8.3 8.3 25 8.5 8.5 8.4 8.4 8.4 8.5 8.2 8.4 8.4 8.4 8.4 8.3 8.3 27 8.6 8.1 8.4 8.3 8.3 8.2 8.3 8.4 8.4 8.4 8.4 8.4 8.4 8.3 8.3 28 8.6 8.1 8.4 8.3 8.3 8.4 8.5 8.2 8.4 8.4 8.4 8.4 8.4 8.4 8.3 8.3 30 8.7 8.2 8.4 8.3 8.3 8.4 8.5 8.2 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.3 8.3 8.3 31 8.7 8.2 8.4 8.4 8.5 8.2 8.3 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4													
14 8.6 8.2 8.4 8.4 8.2 8.3 8.5 8.3 8.2 8.3 8.3 8.2 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3													
16			8.3	8.5									
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14 8.3 8.2 8.3 8.1 7.9 7.9 7.9 7.8 7.8 7.6 7.5 7.5 15 8.3 8.2 8.3 8.1 7.9 8.0 7.8 7.7 7.8 7.7 7.5 7.6 16 8.3 8.2 8.3 8.1 8.0 8.1 7.8 7.7 7.8 7.7 7.6 7.6 17 8.3 8.2 8.3 8.1 7.9 7.8 7.8 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 </td <td></td>													
16 8.3 8.2 8.3 8.1 8.0 8.1 7.8 7.7 7.8 7.7 7.6 7.6 17 8.3 8.2 8.3 8.1 7.9 8.1 7.8 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8	14	8.3	8.2	8.3	8.1	7.9	7.9	7.9	7.8	7.8	7.6	7.5	7.5
17 8.3 8.2 8.3 8.1 7.9 8.1 7.8 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.8 7.8 7.7 7.7 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.													
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22 8.3 8.2 8.2 7.6 7.6 7.6 7.6 8.1 7.9 8.0 8.0 7.9 7.9 7.9 23 8.3 8.2 8.2 7.6 7.6 7.6 7.6 8.1 7.9 8.1 8.0 8.0 8.0 8.1 8.0 8.0 8.0 7.9 8.1 7.9 8.0 8.0 7.9 8.1 7.9 8.0 8.0 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9													
23 8.3 8.2 8.2 7.6 7.6 7.6 8.1 7.9 8.0 8.1 8.0 8.0 24 8.3 7.9 8.2 7.7 7.6 7.6 8.0 7.8 7.9 8.1 7.9 8.0 25 7.9 7.8 7.8 7.6 7.6 7.6 8.0 7.8 8.0 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	21	8.3	8.2	8.2	7.7	7.6	7.6	8.2		8.1	7.9	7.8	7.8
24 8.3 7.9 8.2 7.7 7.6 7.6 7.6 8.0 7.8 7.9 8.1 7.9 8.0 25 7.9 7.8 7.6 7.6 7.6 8.0 7.8 8.0 7.9 7.9 7.9 26 7.9 7.7 7.8 7.6 7.6 7.6 8.0 7.9 8.0 8.0 7.9 7.9 27 8.3 7.9 8.2 7.6 7.6 7.6 8.0 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>													
26 7.9 7.7 7.8 7.6 7.6 7.6 8.0 7.9 8.0 8.0 7.9 7.9 27 8.3 7.9 8.2 7.6 7.6 7.6 8.0 7.9 7.9 7.9 7.9 7.9 28 8.4 8.3 8.3 7.6 7.5 7.6 7.5 7.6 7.9 7.9 7.9 7.9 7.9 7.9 7.9 29 7.6 7.6 7.6 7.6 8.0 7.9 7.9 7.9 7.9 7.9 7.9 30 7.0 7.6 7.6 7.6 7.6 8.0 7.9 8.0 8.0 7.9 7.9 7.9 31 7.7 7.6 7.7 7.6 7.7 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 8.0 7.9 8.0 8.0 8.0 7.9 8.0 8.0 8.0 7.9 8.0 8.0 8.0 7.9 8.0 8.0 8.0 7.9 8.0 8.0 8.0 7.9 8.0 8.0 8.0 7.9 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	24	8.3	7.9	8.2	7.7	7.6	7.6	8.0	7.8	7.9	8.1	7.9	8.0
27 8.3 7.9 8.2 7.6 7.6 7.6 8.0 7.9 7.9 7.9 7.9 7.9 7.9 28 8.4 8.3 8.3 7.6 7.5 7.6 7.6 8.0 7.9 7.9 7.9 7.9 7.9 7.9 7.9 29 7.6 7.6 7.6 7.6 8.0 7.9 7.9 7.9 7.9 7.9 30 7.6 7.6 7.6 7.6 7.6 8.0 7.9 8.0 8.0 7.9 7.9 31 7.7 7.6 7.7 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 8.0 7.9 8.0 8.0 8.0 7.9 8.0 8.0 8.0 7.9 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0													
28 8.4 8.3 8.3 7.6 7.5 7.6 7.9 7.9 7.9 7.9 7.9 7.9 29 7.6 7.6 7.6 7.6 8.0 7.9 7.9 7.9 7.9 7.9 30 7.6 7.6 7.6 7.6 8.0 7.9 8.0 8.0 7.9 7.9 31 7.7 7.6 7.7 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0													
30 7.6 7.6 7.6 7.6 8.0 7.9 8.0 8.0 7.9 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 7.9 8.0 8.0 8.0 7.9 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	28	8.4	8.3	8.3	7.6	7.5	7.6	7.9	7.9	7.9	7.9	7.9	7.9
MAX 8.5 8.3 8.4 8.5 8.4 8.9 8.3 8.7 8.1 8.0 8.0	30				7.6	7.6	7.6	8.0	7.9	8.0	8.0	7.9	7.9
	31				7.7	7.6	7.7				8.0	7.9	8.0

187 06887500 KANSAS RIVER AT WAMEGO, KS--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

	•		•	·		•						
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			JULY			AUGUST			SEPTEMB	ER
1 2 3 4 5	8.0 7.9 7.9 8.0 8.0	7.8 7.8 7.9 7.9 7.8	7.8 7.9 7.9 7.9 7.8	7.8 7.9 7.9 7.9 8.0	7.8 7.8 7.8 7.8 7.7	7.8 7.8 7.8 7.8 7.9	7.7 7.6 7.5 7.5 7.6	7.5 7.5 7.5 7.4 7.5	7.6 7.5 7.5 7.5 7.5	7.8 7.8 7.9 8.1 8.5	7.7 7.7 7.8 7.8 8.0	7.7 7.7 7.8 7.9 8.1
6 7 8 9 10	7.8 7.9 7.8 7.7	7.7 7.8 7.7 7.7 7.6	7.8 7.8 7.8 7.7 7.6	7.9 8.0 8.0 8.1 8.2	7.8 7.9 7.9 7.9 8.0	7.9 8.0 8.0 8.0	7.6 7.7 7.8 7.7 7.8	7.5 7.6 7.6 7.5 7.6	7.6 7.6 7.6 7.6 7.6	8.5 8.5 8.6 8.6 8.5	8.1 8.2 8.2 8.3 8.2	8.3 8.4 8.4 8.2
11 12 13 14 15	7.6 7.6 7.6 7.7 7.8	7.6 7.6 7.6 7.6 7.7	7.6 7.6 7.6 7.6 7.7	8.2 8.2 8.4 8.4	8.1 8.1 8.2 8.2	8.1 8.1 8.2 8.3 8.3	7.8 7.8 8.0 8.0 7.9	7.6 7.5 7.4 7.6 7.6	7.6 7.7 7.6 7.7 7.7	8.2 8.2 8.3 8.5 8.4	8.1 8.1 8.2 8.2	8.1 8.2 8.2 8.3 8.3
16 17 18 19 20	7.8 7.8 7.7 7.8 7.8	7.7 7.7 7.7 7.6 7.6	7.8 7.8 7.7 7.7	8.5 8.5 8.4 8.6 8.6	8.1 8.2 7.9 8.0 8.1	8.3 8.3 8.2 8.1 8.3	8.0 8.0 8.1 8.1	7.6 7.6 7.6 7.6 7.7	7.8 7.8 7.8 7.9 7.9	8.3 8.3 8.2	8.1 8.1 8.0 7.9	8.2 8.2 8.1 e8.0
21 22 23 24 25	7.8 7.8 7.8 7.7	7.6 7.7 7.7 7.7 7.6	7.8 7.7 7.8 7.7 7.6	8.6 8.2 8.1 7.9 7.9	8.0 7.8 7.7 7.6 7.6	8.2 8.1 7.8 7.7 7.7	8.2 8.1 8.1 7.9 7.5	7.7 7.7 7.7 7.3 7.2	7.9 7.9 7.9 7.6 7.4	8.0 8.0 8.1 8.1	7.9 7.9 8.0 8.1	8.0 8.0 8.1 8.1
26 27 28 29 30 31	7.7 7.7 7.8 7.8 7.8	7.6 7.7 7.7 7.8 7.8	7.6 7.7 7.8 7.8 7.8	7.8 7.9 8.1 8.1 8.1	7.5 7.6 7.6 7.7 7.8 7.6	7.7 7.7 7.8 7.8 8.0 7.7	7.3 7.4 7.4 7.6 7.6 7.7	7.1 7.3 7.4 7.4 7.6 7.6	7.3 7.3 7.4 7.5 7.6 7.7	8.1 8.2 8.1 8.1	8.1 8.1 8.0 7.9	8.1 8.1 8.0 8.0
MAX MIN	8.0 7.6	7.9 7.6	7.9 7.6	8.6 7.8	8.2 7.5	8.3 7.7	8.2 7.3	7.7 7.1	7.9 7.3	8.6 7.8	8.3 7.7	8.4 7.7

e Estimated

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER	ર	N	OVEMBER		DE	CEMBER			JANUARY	
1 2 3 4 5	21.4 22.2 23.0 20.7 17.8	16.7 17.5 18.3 16.8 14.3	18.9 19.8 20.6 18.4 16.5	18.8 17.2 14.4 14.8 14.1	15.9 13.6 12.1 10.6 12.7	18.0 15.3 13.1 12.7 13.4	2.4 3.2 3.4 4.8 3.4	1.7 1.8 .4 1.2 1.3	2.0 2.4 1.9 2.9 2.1	 	 	
6 7 8 9 10	14.3 13.2 	11.3 9.1 8.6 	12.4 11.1 e11.1 	14.2 9.0 6.9 7.2 6.7	9.0 6.9 5.3 4.0 3.3	11.9 8.0 5.9 5.4 4.9	3.6 5.7 4.8 4.2	.7 1.6 2.8 2.6	2.0 3.5 4.0 3.6	 	 	
11 12 13 14 15	15.7 18.1 18.4 18.2 19.3	10.5 12.8 15.2 16.6 16.5	13.0 15.3 16.9 17.5 17.7	4.7 6.7 4.7 5.4 6.7	3.8 3.6 1.4 1.6 2.6	4.2 5.0 3.0 3.3 4.5	 			 	 	
16 17 18 19 20	20.3 20.0 19.9 20.1 20.1	16.3 15.4 14.6 16.0 15.7	18.0 17.6 17.3 18.1 17.8	5.3 4.3 4.9 5.4 3.7	2.0 .6 1.2 2.3 1.0	3.5 2.3 2.9 3.5 2.3	 			 1.0 .0	 1 1	 .0 1
21 22 23 24 25	18.2 17.6 20.9 19.6 18.7	16.7 16.6 17.4 17.8 17.1	17.5 17.2 18.8 18.8 17.8	4.6 4.5 5.6 5.3 5.7	.1 1.4 2.4 2.9 3.1	2.3 3.0 4.0 4.1 4.3	 		 	2.2 3.2 3.8 4.2 1.7	1 1 .6 .9	.4 1.2 2.2 2.4 .6
26 27 28 29 30 31	19.7 18.8 18.3 19.1 19.5 20.4	16.4 17.0 17.0 16.3 15.3 16.8	17.7 17.9 17.6 17.4 17.4	6.1 5.1 7.4 6.0 3.9	2.6 2.4 3.7 3.1 1.8	4.3 3.9 5.3 4.5 2.7	 			1.1 1.1 1.0 1.9 2.3 4.2	2 1 .1 1.0 .9	.8 .3 .5 1.3 1.5 2.3
MONTH	23.0	8.6	17.1	18.8	.1	6.1	5.7	.4	2.7	4.2	2	1.0

06887500 KANSAS RIVER AT WAMEGO, KS--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		TEMPE	RATURE,	WATER (DE	э. С), N	ATER YEAR	OCTOBER	2000 10	SEPTEMBER	R 2001		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2	3.1	1 2	1.6 .0	2.3 2.6 3.6	1.8 1.7	2.0 2.1 2.4	10.8	6.5 6.5	7.0 7.9	22.6 21.3	17.1 19.2	19.6 20.1
3 4	3.0 4.2	1 .9	$\frac{1.1}{2.4}$	2.6 3.6 5.1	1.4 1.8	2.4 3.3	11.7 10.6		10.5 9.6	20.7 21.0	18.3 18.1	19.4 19.4
5	6.7	1.4	3.9	4.7	3.1	3.6	14.1		11.5	22.4	18.6	20.1
6 7	6.9 6.8	3.2	4.9 4.6	4.2 3.5	2.2	3.2 2.8	15.8 17.6	12.9 13.1	14.3 15.3	22.5 21.8	18.5 18.2	20.2 19.9
8	6.2	1.7	4.6	6.1 7.2	1.7	3.7 4.9	18.9 19.7	13.3		22.3	17.8	19.9 21.1
10	.0	1	1	7.8	4.6	6.0	18.2			22.4		20.7
11	.0	1	1	5.7	4.1	4.6	16.5	14.4		21.5	19.1	20.4
12 13	1.3	1 1.3	1 2.3 1.3	7.1 9.2 8.7	3.3 4.8	5.0 6.8	14.4 15.1	11.4		21.7	19.0 18.9	20.5
14 15	3.0 1.1	1 2	.2	7.5	6.4 5.2	7.4 6.7	14.2 14.7		13.0 13.0	22.5 23.0	19.5 19.8	21.0 21.3
16	1.5	1	.2	7.6	4.4	5.8	13.5	11.4		23.9	20.5	22.1
17 18	.0 1.4	2 1	1 .4	9.2 7.9 9.0	5.0 6.3	6.9 7.2	13.1 14.1	10.9	11.5 12.3	23.7 22.1	21.5 21.2	22.5 21.5
19 20	6.2 5.9	.1 2.4	2.8 3.9	9.0 6.4	6.4 2.8	7.4 4.3	14.8 18.2		13.2 15.8	23.4 22.3	20.1 20.5	21.6 21.2
21	2.6	2	.6	4.6	3.1	3.8	20.6	16.0	18.1	20.5	18.5	19.3
22 23	4.0	1 1.1	1.4 1.5	5.1 5.3 5.5	3.6 3.9	3.8 4.3 4.5 4.7	19.4 18.0	17.7 13.9	18.4 15.8	19.8 20.2	18.1 17.8	19.0 18.9
24 25	3.2	1.7	2.3	5.5 5.6	4.0	4.7	18.2			18.8 19.7	17.8 17.4	18.3 18.5
26	2.3	1.3	1.7	5.9	4.1							19.2
27 28	2.1	1.3	1.6	5.8 5.5	4.2	5.0 5.1	20.8 21.4 21.7 21.9	17.4 17.7	19.3	20.8 21.4 21.8 21.1 19.8 18.8	18.3	19.8
29	2.3	1.3	1.7	6.9	4.7	5.7	21.9	17.9	19.6 19.7	21.1	18.5 18.9	20.1 19.7
30 31				7.1 9.2	5.5 6.5	6.4 7.7	20.2	18.0	18.8	19.8	18.8 17.6	19.1 18.0
MONTH	6.9	2	1.7	9.2	1.4	4.9	21.9	6.5	14.6	24.0	17.1	20.1
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBI	
1	21.7	JUNE 17.2	19.1	26.4	JULY 24.5	25.4	32.1	AUGUST	30.1	27.2	SEPTEMBI	ER 25.9
1 2 3	21.7 22.1 21.0	JUNE 17.2 19.1 17.8	19.1 20.5 19.1	26.4 26.3 27.2	JULY 24.5 24.3 24.6	25.4 25.3 25.8	32.1 32.6 32.6	AUGUST 28.3 28.3 29.0	30.1 30.3 30.7	27.2 27.8 28.9	24.7 24.4 25.3	25.9 26.0 26.9
1 2	21.7 22.1	JUNE 17.2 19.1	19.1 20.5	26.4 26.3	JULY 24.5 24.3	25.4 25.3	32.1 32.6	AUGUST 28.3 28.3 29.0 28.9	30.1 30.3	27.2 27.8	SEPTEMBI 24.7 24.4	ER 25.9 26.0
1 2 3 4 5	21.7 22.1 21.0 18.2 19.2	JUNE 17.2 19.1 17.8 17.0 17.8	19.1 20.5 19.1 17.4 18.4	26.4 26.3 27.2 27.9 27.2	JULY 24.5 24.3 24.6 25.1 25.2 25.7	25.4 25.3 25.8 26.4 26.4	32.1 32.6 32.6 33.1 33.2	AUGUST 28.3 28.3 29.0 28.9 28.6	30.1 30.3 30.7 30.9 30.7	27.2 27.8 28.9 29.0 28.3	24.7 24.4 25.3 25.9 25.2	25.9 26.0 26.9 27.4 26.8
1 2 3 4 5	21.7 22.1 21.0 18.2 19.2 20.9 23.7	JUNE 17.2 19.1 17.8 17.0 17.8	19.1 20.5 19.1 17.4 18.4	26.4 26.3 27.2 27.9 27.2 28.4 30.1	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4	25.4 25.3 25.8 26.4 26.4 26.8 28.0	32.1 32.6 32.6 33.1 33.2 33.0 31.0	AUGUST 28.3 28.3 29.0 28.9 28.6 28.5 27.6 27.5	30.1 30.3 30.7 30.9 30.7	27.2 27.8 28.9 29.0 28.3	24.7 24.4 25.3 25.9 25.2	25.9 26.0 26.9 27.4 26.8 26.3 25.6
1 2 3 4 5 6 7 8 9	21.7 22.1 21.0 18.2 19.2 20.9 23.7 22.8 20.8	JUNE 17.2 19.1 17.8 17.0 17.8 18.7 20.5 19.4 18.8	19.1 20.5 19.1 17.4 18.4 19.6 21.6 20.6 19.8	26.4 26.3 27.2 27.9 27.2 28.4 30.1 30.8 32.4	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4 27.0 28.0	25.4 25.3 25.8 26.4 26.4 26.8 28.0 28.7 30.0	32.1 32.6 32.6 33.1 33.2 33.0 31.0 30.7 30.4	AUGUST 28.3 28.3 29.0 28.9 28.6 28.5 27.6 27.5 27.4	30.1 30.3 30.7 30.9 30.7	27.2 27.8 28.9 29.0 28.3	24.7 24.4 25.3 25.9 25.2	25.9 26.0 26.9 27.4 26.8 26.3 25.6 24.3 22.9
1 2 3 4 5 6 7 8 9	21.7 22.1 21.0 18.2 19.2 20.9 23.7 22.8 20.8 20.9	JUNE 17.2 19.1 17.8 17.0 17.8 18.7 20.5 19.4 18.8 18.7	19.1 20.5 19.1 17.4 18.4 19.6 21.6 20.6 19.8 19.9	26.4 26.3 27.2 27.9 27.2 28.4 30.1 30.8 32.4 31.4	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4 27.0 28.0 28.2	25.4 25.3 25.8 26.4 26.4 26.8 28.0 28.7 30.0 29.9	32.1 32.6 32.6 33.1 33.2 33.0 31.0 30.7 30.4 28.9	28.3 28.3 29.0 28.9 28.6 28.5 27.6 27.5 27.4 25.1	30.1 30.3 30.7 30.9 30.7 30.6 29.4 29.0 28.7 26.6	27.2 27.8 28.9 29.0 28.3 27.5 26.8 25.5 25.0 25.2	24.7 24.4 25.3 25.9 25.2 25.1 24.6 23.1 21.0 20.4	25.9 26.0 26.9 27.4 26.8 26.3 25.6 24.3 22.9 22.6
1 2 3 4 5 6 7 8 9 10	21.7 22.1 21.0 18.2 19.2 20.9 23.7 22.8 20.8 20.9	JUNE 17.2 19.1 17.8 17.0 17.8 18.7 20.5 19.4 18.8 18.7	19.1 20.5 19.1 17.4 18.4 19.6 20.6 19.8 19.9	26.4 26.3 27.2 27.9 27.2 28.4 30.1 30.8 32.4 31.4	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4 27.0 28.0 28.2 27.0 25.8	25.4 25.3 25.8 26.4 26.4 26.8 28.0 28.7 30.0 29.9 28.7 26.8	32.1 32.6 32.6 33.1 33.2 33.0 31.0 30.7 30.4 28.9 28.9	AUGUST 28.3 28.3 29.0 28.9 28.6 28.5 27.6 27.5 27.4 25.1 25.5 26.0	30.1 30.3 30.7 30.9 30.7 30.6 29.4 29.0 28.7 26.6	27.2 27.8 28.9 29.0 28.3 27.5 26.8 25.5 25.0 25.2	24.7 24.4 25.3 25.9 25.2 25.1 24.6 23.1 21.0 20.4	25.9 26.0 26.9 27.4 26.8 26.3 25.6 24.3 22.6 22.6
1 2 3 4 5 6 7 8 9 10 11 12 13 14	21.7 22.1 21.0 18.2 19.2 20.9 23.7 22.8 20.8 20.9 21.5 21.6 21.8	JUNE 17.2 19.1 17.8 17.0 17.8 18.7 20.5 19.4 18.8 18.7 19.1 19.3 20.3	19.1 20.5 19.1 17.4 18.4 19.6 20.6 19.8 19.9 20.3 20.5 20.5 20.7	26.4 26.3 27.2 27.9 27.2 28.4 30.1 30.8 32.4 31.4 30.2 28.3 27.6 28.0	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4 27.0 28.0 28.2 27.0 25.8 23.9 24.1	25.4 25.3 25.8 26.4 26.4 26.8 28.0 28.7 30.0 29.9 28.7 26.8 25.6 25.6	32.1 32.6 32.6 33.1 33.2 33.0 31.0 30.7 30.4 28.9 28.9 29.7 29.9	AUGUST 28.3 28.3 29.0 28.9 28.6 28.5 27.6 27.5 27.4 25.1 25.5 26.0 26.8 26.1	30.1 30.3 30.7 30.9 30.7 30.6 29.4 29.0 28.7 26.6 26.9 27.8 28.2 27.6	27. 2 27. 8 28. 9 29. 0 28. 3 27. 5 26. 8 25. 5 25. 0 25. 2 24. 7 26. 5 26. 9 24. 7	24.7 24.4 25.3 25.9 25.2 25.1 24.6 23.1 21.0 20.4 20.7 21.2 22.4 22.3	25.9 26.0 26.9 27.4 26.8 26.3 25.6 24.3 22.9 22.6 23.5 24.4 23.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	21.7 22.1 21.0 18.2 19.2 20.9 23.7 22.8 20.9 21.5 21.6 21.8 21.8 23.4	JUNE 17.2 19.1 17.8 17.0 17.8 18.7 20.5 19.4 18.8 18.7 19.1 19.3 19.3 20.3 21.0	19.1 20.5 19.1 17.4 18.4 19.6 21.6 20.6 19.8 19.9 20.3 20.5 20.5 20.7 22.1	26.4 26.3 27.2 27.9 27.2 28.4 30.1 30.8 32.4 31.4 30.2 28.3 27.6 28.0 26.3	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4 27.0 28.0 28.2 27.0 28.3 24.1 23.9	25.4 25.3 25.8 26.4 26.4 26.8 28.0 28.7 30.0 29.9 28.7 26.8 25.6 25.9 25.1	32.1 32.6 32.6 33.1 33.2 33.0 30.7 30.4 28.9 29.7 29.9 28.9 27.1	28.3 28.3 29.0 28.9 28.6 27.6 27.5 27.4 25.1 25.5 26.0 26.8 26.1 24.5	30.1 30.3 30.7 30.9 30.7 30.6 29.4 29.0 28.7 26.6 26.9 27.8 28.2 27.6 25.8	27.2 27.8 28.9 29.0 28.3 27.5 26.8 25.5 25.0 25.2 24.7 26.5 26.9 24.7 22.5	24.7 24.4 25.3 25.9 25.2 25.1 24.6 23.1 21.0 20.4 20.7 21.2 22.4 22.3 20.3	25.9 26.0 26.9 27.4 26.8 26.8 26.3 25.6 24.3 22.9 22.6 22.6 23.5 24.4 23.4 21.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	21.7 22.1 21.0 18.2 19.2 20.9 23.7 22.8 20.8 20.9 21.5 21.6 21.8 23.4	JUNE 17.2 19.1 17.8 17.0 17.8 18.7 20.5 19.4 18.8 18.7 19.1 19.3 19.3 20.3 21.0 21.4 21.4	19.1 20.5 19.1 17.4 18.4 19.6 21.6 20.6 19.8 19.9 20.3 20.5 20.5 20.7 22.1	26.4 26.3 27.2 27.9 27.2 28.4 30.1 30.8 32.4 31.4 30.2 28.3 27.6 28.0 26.3	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4 27.0 28.0 28.2 27.0 25.8 23.9 24.1 23.9 24.1 23.9	25.4 25.3 25.8 26.4 26.4 26.8 28.0 28.7 30.0 29.9 28.7 26.8 25.6 25.9 25.1	32.1 32.6 32.6 33.1 33.2 33.0 31.0 30.7 30.4 28.9 29.7 29.9 29.7 29.9 28.9 27.1	AUGUST 28.3 28.3 29.0 28.9 28.6 28.5 27.6 27.5 27.4 25.1 25.5 26.0 26.8 26.1 24.5	30.1 30.3 30.7 30.9 30.7 30.6 29.4 29.0 28.7 26.6 27.8 28.2 27.8 28.2 27.6 25.8	27.2 27.8 28.9 29.0 28.3 27.5 26.8 25.5 25.0 25.2 24.7 26.5 26.9 24.7 22.5	24.7 24.4 25.3 25.9 25.2 25.1 24.6 23.1 21.0 20.4 20.7 21.2 22.4 22.3 20.3	25.9 26.0 26.9 27.4 26.8 26.8 26.3 25.6 24.3 22.9 22.6 22.6 23.5 24.4 23.4 21.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	21.7 22.1 21.0 18.2 19.2 20.9 23.7 20.8 20.9 21.5 21.6 21.8 23.4 23.2 23.5 22.4	JUNE 17.2 19.1 17.8 17.0 17.8 18.7 20.5 19.4 18.8 18.7 19.1 19.3 20.3 21.0 21.4 21.4 21.0 21.6	19.1 20.5 19.1 17.4 18.4 19.6 20.6 20.6 19.8 19.9 20.3 20.5 20.7 22.1 22.4 22.3 22.1 21.8	26.4 26.3 27.2 27.9 27.2 28.4 30.1 30.8 32.4 31.4 30.2 28.3 27.6 28.0 26.3 28.4 31.5 32.0	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4 27.0 28.0 28.2 27.0 25.8 23.9 24.1 23.9	25.4 25.3 25.8 26.4 26.4 26.8 28.0 28.7 30.0 29.9 28.7 26.8 25.6 25.9 25.1 25.5 28.4 29.4	32.1 32.6 32.6 33.1 33.2 33.0 31.0 30.7 30.4 28.9 29.7 29.9 29.7 28.9 27.1 28.8 27.4 28.7	AUGUST 28.3 28.3 29.0 28.9 28.6 28.5 27.6 27.4 25.1 25.5 26.0 26.8 26.1 24.5 24.1 24.6 24.5 23.5	30.1 30.3 30.7 30.9 30.7 30.6 29.4 29.0 28.7 26.6 26.9 27.8 28.2 27.6 25.8	27. 2 27. 8 28. 9 29. 0 28. 3 27. 5 26. 8 25. 5 25. 0 25. 2 24. 7 26. 5 26. 9 24. 7 22. 5 23. 7 23. 9 22. 6 23. 5	24.7 24.4 25.3 25.9 25.2 25.1 24.6 23.1 21.0 20.4 20.7 21.2 22.4 22.3 20.3 20.0 21.5 20.9	25.9 26.0 26.9 27.4 26.8 26.3 25.6 24.3 22.9 22.6 23.5 24.4 23.4 21.0 21.5 22.4 21.7 e21.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	21.7 22.1 21.0 18.2 19.2 20.9 23.7 22.8 20.9 21.5 21.6 21.8 21.8 23.4 23.2 23.5 22.4 21.9	JUNE 17.2 19.1 17.8 17.0 17.8 18.7 20.5 19.4 18.8 18.7 19.1 19.3 19.3 20.3 21.0 21.4 21.0 21.6 20.8	19.1 20.5 19.1 17.4 18.4 19.6 21.6 20.6 19.8 19.9 20.3 20.5 20.5 20.5 22.1 22.4 22.3 22.1 21.8 21.4	26.4 26.3 27.2 27.9 27.2 28.4 30.1 30.8 32.4 31.4 30.2 28.3 27.6 28.0 26.3 28.4 31.5 32.0 30.9 31.9	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4 27.0 28.0 28.2 27.0 28.3 24.1 23.9 24.1 23.9 24.1 23.9 24.1 23.9	25.4 25.3 25.8 26.4 26.4 26.8 28.7 30.0 29.9 28.7 26.8 25.6 25.9 25.1 25.5 28.4 29.4 28.8	32.1 32.6 32.6 33.1 33.2 33.0 31.0 30.7 28.9 28.9 29.7 29.9 28.9 27.1 28.8 27.4 28.7 28.7	28.3 28.3 29.0 28.9 28.6 27.6 27.5 27.4 25.1 25.5 26.0 26.8 26.1 24.5 24.5 23.5 23.9	30.1 30.3 30.7 30.9 30.7 30.6 29.4 29.0 28.7 26.6 26.9 27.8 28.2 27.6 25.8 26.2 26.0 26.4 26.1	27.2 27.8 28.9 29.0 28.3 27.5 26.8 25.5 25.0 25.2 24.7 26.5 26.9 24.7 22.5	24.7 24.4 25.3 25.9 25.2 25.1 24.6 23.1 21.0 20.4 20.7 21.2 22.4 22.3 20.3 20.3	25.9 26.0 26.9 27.4 26.8 26.3 25.6 24.3 22.9 22.6 22.6 23.5 24.4 23.4 21.0 21.5 22.4 21.7 e21.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	21.7 22.1 21.0 18.2 19.2 20.9 23.7 22.8 20.8 20.9 21.5 21.6 21.8 23.4 23.2 23.2 23.5 22.4 21.9	JUNE 17.2 19.1 17.8 17.0 17.8 18.7 20.5 19.4 18.8 18.7 19.1 19.3 20.3 21.0 21.4 21.0 21.6 20.8 20.8 20.8 21.8	19.1 20.5 19.1 17.4 18.4 19.6 21.6 20.6 19.8 19.9 20.3 20.5 20.5 20.7 22.1 22.4 22.3 22.1 21.4 22.1 23.0	26.4 26.3 27.2 27.9 27.2 28.4 30.1 30.8 32.4 31.4 30.2 28.3 27.6 28.0 26.3 28.4 31.5 32.0 30.9 31.9	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4 27.0 28.0 28.2 27.0 25.8 23.9 24.1 23.9 24.1 23.9 24.1 23.9 24.1 23.9	25.4 25.3 25.8 26.4 26.4 26.8 28.0 28.7 30.0 29.9 28.7 26.8 25.6 25.9 25.1 25.5 28.4 29.4 29.3 29.7 29.9	32.1 32.6 32.6 33.1 33.2 33.0 31.0 30.7 30.4 28.9 29.7 29.9 28.9 27.1 28.8 27.4 28.7 28.5	AUGUST 28.3 28.3 29.0 28.9 28.6 28.5 27.6 27.4 25.1 25.5 26.0 26.8 26.1 24.5 24.1 24.6 24.5 23.5 23.9	30.1 30.3 30.7 30.9 30.7 30.6 29.4 29.0 28.7 26.6 26.9 27.8 28.2 27.6 25.8 26.2 26.0 26.4 26.1 26.1	27.2 27.8 28.9 29.0 28.3 27.5 26.8 25.5 25.0 25.2 24.7 26.5 26.9 24.7 22.5	24.7 24.4 25.3 25.9 25.2 25.1 24.6 23.1 21.0 20.4 20.7 21.2 22.4 22.3 20.3 20.0 21.5 20.9 20.7 20.7	25.9 26.0 26.9 27.4 26.8 26.3 25.6 24.3 22.9 22.6 23.5 24.4 21.0 21.5 22.4 21.7 e21.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	21.7 22.1 21.0 18.2 19.2 20.9 23.7 20.8 20.9 21.5 21.6 21.8 23.4 23.2 23.5 22.4 21.9	JUNE 17.2 19.1 17.8 17.0 17.8 18.7 20.5 19.4 18.8 18.7 19.1 19.3 20.3 21.0 21.4 21.4 21.0 21.6 20.8	19.1 20.5 19.1 17.4 18.4 19.6 20.6 20.6 20.5 20.7 22.1 22.4 22.3 22.1 21.8 21.4	26.4 26.3 27.2 27.9 27.2 28.4 30.1 30.8 32.4 31.4 30.2 28.3 27.6 28.0 26.3 28.4 31.5 32.0 30.9 31.9	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4 27.0 28.0 28.2 27.0 25.8 23.9 24.1 23.9 23.3 26.0 27.2 26.6 27.1	25.4 25.3 25.8 26.4 26.4 26.8 28.0 28.7 30.0 29.9 28.7 26.8 25.6 25.9 25.1 25.5 28.4 29.3 29.7	32.1 32.6 32.6 33.1 33.2 33.0 31.0 30.7 30.4 28.9 29.7 29.9 27.1 28.8 27.4 28.7 28.7 28.5	AUGUST 28.3 28.3 29.0 28.9 28.6 28.5 27.6 27.5 27.4 25.1 25.5 26.0 26.8 26.1 24.5 24.1 24.6 24.5 23.5 23.9	30.1 30.3 30.7 30.9 30.7 30.6 29.4 29.0 28.7 26.6 26.9 27.8 28.2 27.6 25.8 26.2 26.0 26.4 26.1 26.1	27.2 27.8 28.9 29.0 28.3 27.5 26.8 25.5 25.0 25.2 24.7 26.5 26.9 24.7 22.5 23.7 23.9 22.6	24.7 24.4 25.3 25.9 25.2 25.1 24.6 23.1 21.0 20.4 20.7 21.2 22.4 22.3 20.3 20.0 21.5 20.9 20.7 20.7	25.9 26.0 26.9 27.4 26.8 26.3 25.6 24.3 22.9 22.6 23.5 24.4 21.0 21.5 22.4 21.7 e21.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	21.7 22.1 21.0 18.2 19.2 20.9 23.7 22.8 20.9 21.5 21.6 21.8 21.8 23.4 23.2 23.5 22.4 21.9 24.0 24.1 24.3 24.4 24.4	JUNE 17.2 19.1 17.8 17.0 17.8 18.7 20.5 19.4 18.8 18.7 19.1 19.3 20.3 21.0 21.4 21.0 21.6 20.8 20.8 20.8 21.8 22.2	19.1 20.5 19.1 17.4 18.4 19.6 21.6 20.6 19.8 19.9 20.3 20.5 20.5 20.7 22.1 22.4 22.3 22.1 21.8 21.4 22.3 22.1 23.0 23.3	26.4 26.3 27.2 27.9 27.2 28.4 30.1 30.8 32.4 31.4 30.2 28.3 27.6 28.0 30.9 31.9 32.1 31.9 30.6 30.6 29.7	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4 27.0 28.0 28.2 27.0 25.8 23.9 24.1 23.9 24.1 23.9 24.1 23.9 24.1 27.4 27.8	25.4 25.3 25.8 26.4 26.4 26.8 28.0 28.7 30.0 29.9 28.7 26.8 25.6 25.9 25.1 25.5 28.4 29.3 29.7 29.9	32.1 32.6 32.6 33.1 33.2 33.0 31.0 30.7 30.4 28.9 28.9 27.1 28.8 27.4 28.7 28.7 28.7 28.7 28.7	AUGUST 28.3 28.3 29.0 28.9 28.6 28.5 27.6 27.5 27.4 25.1 25.5 26.0 26.8 26.1 24.5 24.5 23.5 23.9 25.0 25.0	30.1 30.3 30.7 30.9 30.7 30.6 29.4 29.0 28.7 26.6 27.8 28.2 27.6 25.8 26.2 26.0 26.4 26.1 26.9 26.9	27.2 27.8 28.9 29.0 28.3 27.5 26.8 25.5 25.0 25.2 24.7 26.5 26.9 24.7 22.5 23.7 23.7 23.9 22.6 23.5	24.7 24.4 25.3 25.9 25.2 25.1 24.6 23.1 21.0 20.4 20.7 21.2 22.4 22.3 20.3 20.0 21.5 20.9 20.7 20.7 19.9	25.9 26.0 26.9 27.4 26.8 26.3 25.6 24.3 22.9 22.6 22.6 23.5 24.4 21.0 21.5 22.4 21.7 e21.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	21.7 22.1 21.0 18.2 19.2 20.9 23.7 20.8 20.9 21.5 21.6 21.8 23.4 23.2 23.2 23.2 23.2 24.0 24.0 24.1 24.3 24.4	JUNE 17.2 19.1 17.8 17.0 17.8 18.7 20.5 19.4 18.8 18.7 19.1 19.3 20.3 21.0 21.4 21.4 21.0 21.6 20.8 20.8 21.8 22.5	19.1 20.5 19.1 17.4 18.4 19.6 20.6 20.6 19.8 19.9 20.3 20.5 20.7 22.1 22.4 22.3 22.1 21.8 21.4 22.1 23.3 23.5 23.4	26.4 26.3 27.2 27.9 27.2 28.4 30.1 30.8 32.4 31.4 30.2 28.3 27.6 28.0 26.3 28.4 31.5 32.0 32.9 31.9 32.1 31.9 32.1 31.9	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4 27.0 28.0 28.2 27.0 25.8 23.9 24.1 23.9 23.3 26.0 27.2 26.6 27.1	25.4 25.3 25.8 26.4 26.4 26.8 28.7 30.0 29.9 28.7 26.8 25.6 25.9 25.1 25.5 28.4 29.3 29.7 29.9 28.8 29.3	32.1 32.6 32.6 33.1 33.2 33.0 31.0 30.7 30.4 28.9 29.7 29.7 29.9 27.1 28.8 27.4 28.7 28.5 28.8 29.0 29.1 28.6 27.6	AUGUST 28.3 28.3 29.0 28.9 28.6 28.5 27.6 27.5 25.1 25.5 26.0 26.8 26.1 24.5 24.1 24.6 24.5 23.5 23.9 25.0 25.0 25.0 24.7 24.3	30.1 30.3 30.7 30.9 30.7 30.6 29.4 29.0 28.7 26.6 26.9 27.8 28.2 27.6 25.8 26.2 26.0 26.1 26.1 26.9 27.0 26.9	27.2 27.8 28.9 29.0 28.3 27.5 26.8 25.5 25.0 25.2 24.7 26.5 26.9 24.7 22.5 23.7 23.9 22.4 23.5	SEPTEMBI 24.7 24.4 25.3 25.9 25.2 25.1 24.6 23.1 21.0 20.4 20.7 21.2 22.4 22.3 20.3 20.0 21.5 20.9 20.7 20.7 19.9 19.4 19.1 18.8	25.9 26.0 26.9 27.4 26.8 26.3 25.9 22.6 24.3 22.9 22.6 23.5 24.4 21.0 21.5 22.4 21.7 e21.9 20.2 20.2 20.2
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	21.7 22.1 21.0 18.2 19.2 20.9 23.7 22.8 20.9 21.5 21.6 21.8 23.4 23.2 23.2 23.5 24.0 24.1 24.1 24.4 24.1 24.9 25.7 26.4	JUNE 17.2 19.1 17.8 17.0 17.8 18.7 20.5 19.4 18.8 18.7 19.3 20.3 21.0 21.4 21.4 21.0 20.8 20.8 21.8 22.2 22.5 22.4 22.3 22.7 23.6 23.8 23.8	19.1 20.5 19.1 17.4 18.4 19.6 21.6 20.6 19.8 19.9 20.3 20.5 20.7 22.1 22.4 22.3 22.1 21.4 22.1 23.0 23.3 23.5 23.4 23.4 23.8 24.6 24.6 24.6 24.6 25.0	26.4 26.3 27.2 27.9 27.2 28.4 30.1 30.8 32.4 31.4 30.2 28.3 27.6 28.0 26.3 28.4 31.5 32.0 30.9 31.9 30.6 29.7	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4 27.0 28.0 28.2 27.0 25.8 23.9 24.1 23.9 23.3 26.0 27.2 26.6 27.1 27.4 27.8 27.8 26.4 27.0 26.2 26.6 27.1	25.4 25.3 25.8 26.4 26.4 26.8 28.0 29.9 28.7 26.8 25.5 25.6 25.9 25.1 25.5 28.4 29.4 29.3 29.7 29.9 28.7 29.9 28.7 27.6 28.8 29.3 29.7 29.9 28.8 29.3 29.7 29.9 28.8 29.3 29.7 29.9 28.8 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1	32.1 32.6 32.6 33.1 33.2 33.0 31.0 30.4 28.9 29.7 29.9 27.1 28.8 27.4 28.7 28.7 28.5 28.8 29.0 29.1 26.6 27.6 26.0 27.6 28.1 28.8 27.6	AUGUST 28.3 28.3 29.0 28.9 28.6 28.5 27.6 27.4 25.1 25.5 26.0 26.8 26.1 24.5 24.1 24.6 24.5 23.5 23.9 25.0 25.0 24.7 24.3	30.1 30.3 30.7 30.9 30.7 30.6 29.4 29.0 28.7 26.6 25.8 26.2 27.6 25.8 26.2 26.0 26.4 26.1 26.1 26.9 27.0 26.7 26.7	27.2 27.8 28.9 29.0 28.3 27.5 26.8 25.5 25.0 25.2 24.7 26.5 26.5 26.7 22.5 23.7 23.9 22.6 23.5 22.4 21.0 21.3 21.3 21.3 21.3 21.5 20.9	24.7 24.4 25.3 25.9 25.2 25.1 24.6 23.1 21.0 20.4 20.7 21.2 22.4 22.3 20.3 20.0 21.5 20.9 20.7 20.7 19.9 19.4 19.1 18.8 19.0 19.4 18.8 18.5	25.9 26.0 26.9 27.4 26.8 26.3 25.6 24.3 22.9 22.6 23.5 24.4 21.0 21.5 22.4 21.7 e21.9 21.3 20.3 20.2 20.2 20.0 20.3 20.4 19.9 19.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	21.7 22.1 21.0 18.2 19.2 20.9 23.7 22.8 20.8 20.9 21.5 21.6 21.8 23.4 23.2 23.2 23.5 22.4 21.9 24.0 24.1 24.2 24.2 25.7 25.7 25.7 26.4	JUNE 17.2 19.1 17.8 17.0 17.8 18.7 20.5 19.4 18.8 18.7 19.1 19.3 20.3 21.0 21.4 21.4 21.6 20.8 20.8 21.8 22.2 22.5 22.4 22.3 22.7 23.6 23.8 23.8 23.8	19.1 19.1 17.4 18.4 19.6 20.6 20.6 19.8 19.9 20.3 20.5 20.7 22.1 22.4 22.3 22.1 21.8 21.4 22.1 23.3 23.5 23.4 23.4 23.8 24.6 24.8 25.0	26.4 26.3 27.2 27.9 27.2 28.4 30.1 30.8 32.4 31.4 30.2 28.3 27.6 28.0 26.3 28.4 31.5 32.0 32.9 31.9 32.1 31.9 32.1 31.9 32.1 33.6 30.6 30.6 30.6 30.6 30.6 30.6 30.6	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4 27.0 28.0 28.2 27.0 28.0 25.8 23.9 24.1 23.9 23.3 26.0 27.2 26.6 27.1 27.4 27.8 27.8 27.8 27.9 26.6 27.1 27.4 27.8 27.8 27.8 27.9 28.8 29.1	25.4 25.3 25.8 26.4 26.4 26.8 28.7 30.0 29.9 28.7 26.6 25.9 25.1 25.5 28.4 29.3 29.7 29.9 28.8 29.3 29.7 29.9 28.3 29.7 29.9 28.3 29.7 29.9 28.8 29.3	32.1 32.6 33.1 33.2 33.0 31.0 30.7 30.4 28.9 29.7 29.7 28.8 27.4 28.7 28.5 28.8 29.0 29.1 28.8 27.6 26.0 27.6	AUGUST 28.3 28.3 29.0 28.9 28.6 28.5 27.6 27.5 27.4 25.1 25.5 26.0 26.8 26.1 24.5 24.1 24.6 24.5 23.5 23.9 25.0 25.0 24.7 24.3	30.1 30.3 30.7 30.9 30.7 30.6 29.4 29.0 28.7 26.6 27.8 22.7 6.2 27.6 25.8 26.2 26.0 26.1 26.1 26.1 26.9 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27.0	27.2 27.8 28.9 29.0 28.3 27.5 26.8 25.5 25.0 25.2 24.7 26.5 26.9 24.7 22.5 23.7 22.5 23.7 22.6 23.5 22.4 21.0 21.3 21.3 21.3 21.2 21.4 21.5	SEPTEMBI 24.7 24.4 25.3 25.9 25.2 25.1 24.6 23.1 21.0 20.4 20.7 21.2 22.4 22.3 20.3 20.0 21.5 20.9 20.7 20.7 19.9 19.4 19.1 18.8 19.0 19.4 18.8 18.5	25.9 26.0 26.9 27.4 26.8 26.3 25.6 24.3 22.9 22.6 23.5 24.4 21.0 21.5 22.4 21.7 e21.9 21.3 20.2 20.2 20.2 20.2 20.2 20.3 20.4 19.9 19.8 2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	21.7 22.1 21.0 18.2 19.2 20.9 23.7 22.8 20.9 21.5 21.6 21.8 23.4 23.2 23.2 23.5 24.0 24.1 24.1 24.4 24.1 24.9 25.7 26.4	JUNE 17.2 19.1 17.8 17.0 17.8 18.7 20.5 19.4 18.8 18.7 19.3 20.3 21.0 21.4 21.4 21.0 20.8 20.8 21.8 22.2 22.5 22.4 22.3 22.7 23.6 23.8 23.8	19.1 20.5 19.1 17.4 18.4 19.6 21.6 20.6 19.8 19.9 20.3 20.5 20.7 22.1 22.4 22.3 22.1 21.4 22.1 23.0 23.3 23.5 23.4 23.4 23.8 24.6 24.6 24.6 24.6 25.0	26.4 26.3 27.2 27.9 27.2 28.4 30.1 30.8 32.4 31.4 30.2 28.3 27.6 28.0 26.3 28.4 31.5 32.0 30.9 31.9 30.6 29.7	JULY 24.5 24.3 24.6 25.1 25.2 25.7 26.4 27.0 28.0 28.2 27.0 25.8 23.9 24.1 23.9 23.3 26.0 27.2 26.6 27.1 27.4 27.8 27.8 26.4 27.0 26.2 26.6 27.1	25.4 25.3 25.8 26.4 26.4 26.8 28.0 29.9 28.7 26.8 25.5 25.6 25.9 25.1 25.5 28.4 29.4 29.3 29.7 29.9 28.7 29.9 28.7 27.6 28.8 29.3 29.7 29.9 28.8 29.3 29.7 29.9 28.8 29.3 29.7 29.9 28.8 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1 29.1	32.1 32.6 32.6 33.1 33.2 33.0 31.0 30.4 28.9 29.7 29.9 27.1 28.8 27.4 28.7 28.7 28.5 28.8 29.0 29.1 26.6 27.6 26.0 27.6 28.1 28.8 27.6	AUGUST 28.3 28.3 29.0 28.9 28.6 28.5 27.6 27.4 25.1 25.5 26.0 26.8 26.1 24.5 24.1 24.6 24.5 23.5 23.9 25.0 25.0 24.7 24.3	30.1 30.3 30.7 30.9 30.7 30.6 29.4 29.0 28.7 26.6 25.8 26.2 27.6 25.8 26.2 26.0 26.4 26.1 26.1 26.9 27.0 26.7 26.7	27.2 27.8 28.9 29.0 28.3 27.5 26.8 25.5 25.0 25.2 24.7 26.5 26.5 26.7 22.5 23.7 23.9 22.6 23.5 22.4 21.0 21.3 21.3 21.3 21.3 21.5 20.9	24.7 24.4 25.3 25.9 25.2 25.1 24.6 23.1 21.0 20.4 20.7 21.2 22.4 22.3 20.3 20.0 21.5 20.9 20.7 20.7 19.9 19.4 19.1 18.8 19.0 19.4 18.8 18.5	25.9 26.0 26.9 27.4 26.8 26.3 25.6 24.3 22.9 22.6 23.5 24.4 21.0 21.5 22.4 21.7 e21.9 21.3 20.3 20.2 20.2 20.0 20.3 20.4 19.9 19.8

e Estimated

06887500 KANSAS RIVER AT WAMEGO, KS--Continued
OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		OXY	GEN DISS	OLVED (MG/	L), WATE	R YEAR (OCTOBER 200	JU TO SEE	TEMBER 2	1001		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		N	OVEMBER		Ι	DECEMBER			JANUARY	ζ
1	10.8	8.4	9.4	12.0	8.1	9.5	15.4	14.3	14.8			
2	11.3	8.2	9.5	13.1	8.6	10.5	16.3	14.5	15.2			
3 4	11.3 11.6	8.1 8.3	9.4 9.7	13.2 13.4	9.3 9.9	10.9 11.3	16.5 16.4	15.0 14.8	15.7 15.5			
5	11.1	8.6	9.6	11.7	9.4	10.2	16.9	14.5	15.5			
6	11.8	9.5	10.6	12.0	9.0	10.3	16.9	15.1	15.9			
7	11.4	10.4	10.9	12.7	10.7	11.7	16.6	14.6	15.5			
8 9				12.9 12.9	11.5 12.2	12.2 12.5	16.8 16.9	14.0 14.2	15.2 15.4			
10				13.2	12.4	12.8	17.1	14.1	15.6			
11	11.3	9.8	10.4	13.4	12.6	13.0						
12	11.2	9.3	10.0	13.3	12.5	12.9						
13 14	11.7 12.0	8.7 8.3	10.0 9.9	$14.0 \\ 14.1$	13.1 13.5	13.6 13.8						
15	12.7	8.4	10.2	13.7	12.6	13.3						
16	12.4	8.4	10.1	13.3	12.6	13.1						
17	12.5	8.6	10.2	13.7	13.1	13.4						
18 19	12.4 12.1	8.6 8.4	10.3 10.1	13.7 13.5	13.1 12.9	13.4 13.1						
20	12.6	8.4	10.2	14.2	13.1	13.7						
21	12.1	8.3	9.9	14.4	13.7	14.0						
22	11.2	8.4	9.5	14.3	13.5	13.8						
23 24	12.9 12.1	8.3 8.2	10.1 9.7	14.1 14.3	13.2 13.1	13.6 13.6						
25	11.2	8.3	9.5	14.4	13.1	13.7						
26	12.6	8.4	10.0	14.5	13.2	13.8						
27	12.4	8.4	9.9	14.9	13.4	14.1						
28 29	12.1 12.2	8.4 8.7	9.7 9.8	14.5 14.9	13.2 13.2	13.7 14.0						
30	13.8	8.5	10.5	15.6	13.2	14.6						
31	13.1	8.3	10.1									
MONTH	13.8	8.1	10.0	15.6	8.1	12.8	17.1	14.0	15.4			
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY		MIN FEBRUARY		MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1		FEBRUARY		16.5		MEAN	MAX 12.1		MEAN	9.5		9.2
1 2		FEBRUARY		16.5 16.5	MARCH 16.3 16.1	16.4 16.3	12.1 12.1	APRIL 11.9 10.6	12.0 11.7	9.5 9.2	MAY 8.9 8.8	9.2 9.0
1 2 3 4		FEBRUARY		16.5	MARCH	16.4	12.1	APRIL	12.0	9.5	MAY 8.9	9.2 9.0 9.3 9.5
1 2 3		FEBRUARY	 	16.5 16.5 16.1	MARCH 16.3 16.1 15.1	16.4 16.3 15.4	12.1 12.1 10.9	APRIL 11.9 10.6 10.3	12.0 11.7 10.6	9.5 9.2 9.4	MAY 8.9 8.8 9.1	9.2 9.0 9.3
1 2 3 4 5	 	FEBRUARY		16.5 16.5 16.1 15.3 14.3	MARCH 16.3 16.1 15.1 14.0	16.4 16.3 15.4 14.5	12.1 12.1 10.9 11.4	APRIL 11.9 10.6 10.3 10.7	12.0 11.7 10.6 11.0 10.7	9.5 9.2 9.4 9.7	MAY 8.9 8.8 9.1 9.2	9.2 9.0 9.3 9.5
1 2 3 4 5		FEBRUARY		16.5 16.5 16.1 15.3 14.3	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.2	16.4 16.3 15.4 14.5 14.2	12.1 12.1 10.9 11.4 11.0	APRIL 11.9 10.6 10.3 10.7 10.3 9.3 9.1	12.0 11.7 10.6 11.0 10.7	9.5 9.2 9.4 9.7 9.6	MAY 8.9 8.8 9.1 9.2 8.9	9.2 9.0 9.3 9.5 9.2
1 2 3 4 5 6 7 8 9		FEBRUARY		16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7	MARCH 16.3 16.1 15.1 14.0 14.1 14.2 14.1 13.8	16.4 16.3 15.4 14.5 14.2 14.1 14.5 14.4	12.1 12.1 10.9 11.4 11.0 10.3 10.6 10.4 10.9	APRIL 11.9 10.6 10.3 10.7 10.3	12.0 11.7 10.6 11.0 10.7 9.9 9.9 9.8 9.6	9.5 9.2 9.4 9.7 9.6	MAY 8.9 8.8 9.1 9.2 8.9	9.2 9.0 9.3 9.5 9.2 e8.8
1 2 3 4 5		FEBRUARY		16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.2 14.1	16.4 16.3 15.4 14.5 14.2 14.1 14.5 14.4	12.1 12.1 10.9 11.4 11.0 10.3 10.6 10.4	APRIL 11.9 10.6 10.3 10.7 10.3	12.0 11.7 10.6 11.0 10.7 9.9 9.9 9.8	9.5 9.2 9.4 9.7 9.6 9.1	MAY 8.9 8.8 9.1 9.2 8.9	9.2 9.0 9.3 9.5 9.2
1 2 3 4 5 6 7 8 9 10		FEBRUARY		16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7 14.3 13.9	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.2 14.1 13.8 13.4	16.4 16.3 15.4 14.5 14.2 14.1 14.5 14.4 14.1 13.6	12.1 10.9 11.4 11.0 10.3 10.6 10.4 10.9 9.8	APRIL 11.9 10.6 10.3 10.7 10.3 9.3 9.1 9.2 8.6 8.8 8.6	12.0 11.7 10.6 11.0 10.7 9.9 9.9 9.8 9.6 9.4	9.5 9.2 9.4 9.7 9.6 9.1 8.5	MAY 8.9 8.8 9.1 9.2 8.9 8.0 8.0	9.2 9.0 9.3 9.5 9.2 e8.8 8.2
1 2 3 4 5 6 7 8 9 10		FEBRUARY		16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7 14.3 13.9	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.2 14.1 13.8 13.4	16.4 16.3 15.4 14.5 14.2 14.1 14.5 14.4 14.1 13.6	12.1 12.1 10.9 11.4 11.0 10.3 10.6 10.4 10.9 9.8 9.3 10.1	APRIL 11.9 10.6 10.3 10.7 10.3 9.3 9.1 9.2 8.6 8.8 8.6 8.9	12.0 11.7 10.6 11.0 10.7 9.9 9.8 9.6 9.4	9.5 9.2 9.4 9.7 9.6 9.1 8.5 8.1	MAY 8.9 8.8 9.1 9.2 8.9 8.0 8.0 8.1	9.2 9.0 9.3 9.5 9.2 e8.8 8.2 8.1 8.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14	 15.3	FEBRUARY 14.0 13.7	 14.6 14.7	16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7 14.3 13.9 14.0 14.2	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.1 13.8 13.4 13.4 13.5 12.9	16.4 16.3 15.4 14.5 14.2 14.1 14.4 14.1 13.6 13.8 13.9 13.9	12.1 10.9 11.4 11.0 10.3 10.6 10.4 10.9 9.8 9.3 10.1 10.3 10.3	APRIL 11.9 10.6 10.3 10.7 10.3 9.3 9.1 9.2 8.6 8.8 8.6 8.9 9.8	12.0 11.7 10.6 11.0 10.7 9.9 9.8 9.6 9.4 9.0 9.7 10.1 9.8	9.5 9.2 9.4 9.7 9.6 9.1 8.5 8.1 8.3	MAY 8.9 8.8 9.1 9.2 8.9 8.0 8.0 8.1 8.2 8.1	9.2 9.0 9.3 9.5 9.2 e8.8 8.2 8.1 8.2 8.3 8.2
1 2 3 4 5 6 7 8 9 10	 15.3	FEBRUARY 14.0	 14.6	16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7 14.3 13.9	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.2 14.1 13.4 13.4 13.4	16.4 16.3 15.4 14.5 14.2 14.1 14.5 14.4 14.1 13.6	12.1 12.1 10.9 11.4 11.0 10.3 10.6 10.4 10.9 9.8 9.3 10.1 10.3	APRIL 11.9 10.6 10.3 10.7 10.3 9.3 9.1 9.2 8.6 8.8 8.6 8.9 9.8	12.0 11.7 10.6 11.0 10.7 9.9 9.8 9.6 9.4 9.0 9.7	9.5 9.2 9.4 9.7 9.6 9.1 8.5 8.1 8.3	MAY 8.9 8.8 9.1 9.2 8.9 8.0 8.0 8.1 8.2	9.2 9.0 9.3 9.5 9.2 e8.8 8.2 8.1 8.2 8.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	 15.3 15.8 15.6	FEBRUARY 14.0 13.7 14.8 15.0	 14.6 14.7 15.2	16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7 14.3 13.9 14.0 14.2 13.8 13.1 13.3	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.1 13.8 13.4 13.4 13.5 12.9 12.5 13.3	16.4 16.3 15.4 14.5 14.2 14.1 14.4 14.1 13.6 13.8 13.9 12.8 12.8	12.1 10.9 11.4 11.0 10.3 10.6 10.4 10.9 9.8 9.3 10.1 10.3 10.1	APRIL 11.9 10.6 10.3 10.7 10.3 9.3 9.1 9.2 8.6 8.8 8.6 8.9 9.7 9.7	12.0 11.7 10.6 11.0 10.7 9.9 9.8 9.6 9.4 9.0 9.7 10.1 9.8 9.8	9.5 9.2 9.4 9.7 9.6 9.1 8.5 8.1 8.3 8.4 8.3	MAY 8.9 8.8 9.1 9.2 8.9 8.0 8.0 8.1 8.2 8.1 8.0 7.9	9.2 9.0 9.3 9.5 9.2 e8.8 8.2 8.1 8.2 8.3 8.2 8.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	 15.3 15.8 15.6	FEBRUARY 14.0 13.7 14.8 15.0 15.3	 14.6 14.7 15.2	16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7 14.3 13.9 14.0 14.2 13.8 13.1 13.3	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.2 14.1 13.8 13.4 13.4 13.5 12.5 12.5	16.4 16.3 15.4 14.5 14.2 14.1 14.5 14.1 13.6 13.8 13.9 13.4 12.8 12.8	12.1 10.9 11.4 11.0 10.3 10.6 10.4 10.9 9.8 9.3 10.1 10.3 10.1 10.3	APRIL 11.9 10.6 10.3 10.7 10.3 9.3 9.1 9.2 8.6 8.8 8.6 8.9 9.8 9.7 9.7 10.1	12.0 11.7 10.6 11.0 10.7 9.9 9.8 9.6 9.4 9.0 9.7 10.1 9.8 9.8	9.5 9.2 9.4 9.7 9.6 9.1 8.5 8.1 8.3 8.4 8.4 8.3	MAY 8.9 8.8 9.1 9.2 8.9 8.0 8.1 8.2 8.1 8.0 7.9	9.2 9.0 9.3 9.5 9.2 e8.8 8.2 8.1 8.2 8.3 8.2 8.3 8.2 8.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	 15.3 15.8 15.6 15.7 16.0 15.7	FEBRUARY 14.0 13.7 14.8 15.0 15.3 15.1 14.1	 14.6 14.7 15.2 15.3 15.6 15.5 14.8	16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7 14.3 13.9 14.0 14.2 13.8 13.1 13.3	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.2 14.1 13.8 13.4 13.5 12.5 12.5 12.5	16.4 16.3 15.4 14.5 14.2 14.1 14.5 14.4 14.1 13.6 13.8 13.9 13.4 12.8 12.8 13.4 12.8 13.2 12.5	12.1 12.1 10.9 11.4 11.0 10.3 10.6 10.4 10.9 9.8 9.3 10.1 10.3 10.1 10.0	APRIL 11.9 10.6 10.3 10.7 10.3 9.3 9.1 9.2 8.6 8.8 8.6 8.9 9.7 9.7 10.1 10.1 9.5	12.0 11.7 10.6 11.0 10.7 9.9 9.8 9.6 9.4 9.7 10.1 9.8 9.8 9.8	9.5 9.2 9.4 9.7 9.6 9.1 8.5 8.1 8.3 8.4 8.3 8.2 8.1 8.2 8.1	MAY 8.9 8.8 9.1 9.2 8.9 8.0 8.0 8.1 8.2 8.1 8.0 7.9 7.9 8.0 8.1	9.2 9.0 9.3 9.5 9.2 e8.8 8.2 8.1 8.2 8.3 8.2 8.0 8.0 8.1 8.2
1 2 3 4 5 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18	 15.3 15.8 15.6 15.7 16.0	FEBRUARY 14.0 13.7 14.8 15.0 15.3 15.1	 14.6 14.7 15.3 15.6 15.5	16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7 14.3 13.9 14.0 14.2 13.8 13.1 13.3	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.2 14.1 13.8 13.4 13.5 12.9 12.5 13.3 12.5 12.4	16.4 16.3 15.4 14.5 14.2 14.1 14.5 14.4 14.1 13.6 13.8 13.9 13.4 12.8 13.4 12.8	12.1 12.1 10.9 11.4 11.0 10.3 10.6 10.4 10.9 9.8 9.3 10.1 10.3 10.1 10.3	APRIL 11.9 10.6 10.3 10.7 10.3 9.3 9.1 9.2 8.6 8.8 8.6 8.9 9.8 9.7 9.7 10.1 10.1	12.0 11.7 10.6 11.0 10.7 9.9 9.8 9.6 9.4 9.7 10.1 9.8 9.8 10.5 10.3	9.5 9.2 9.4 9.7 9.6 9.1 8.5 8.1 8.3 8.4 8.4 8.3	MAY 8.9 8.8 9.1 9.2 8.9 8.0 8.0 8.1 8.2 8.1 8.0 7.9 7.9 8.0	9.2 9.0 9.3 9.5 9.2 e8.8 8.2 8.1 8.2 8.3 8.2 8.2 8.0 8.0 8.1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	 15.3 15.8 15.6 15.7 16.0 15.7 16.1	FEBRUARY 14.0 13.7 14.8 15.0 15.3 15.1 14.1 13.5	 14.6 14.7 15.2 15.3 15.6 15.5 14.8 14.2	16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7 14.3 13.9 14.0 14.2 13.8 13.1 13.3	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.2 14.1 13.8 13.4 13.5 12.5 12.5 12.5 12.5	16.4 16.3 15.4 14.5 14.2 14.1 14.5 14.4 14.1 13.6 13.8 13.9 13.4 12.8 12.8 12.8 12.8	12.1 12.1 10.9 11.4 11.0 10.3 10.6 10.4 10.9 9.8 9.3 10.1 10.0 10.1 10.7 10.5 10.1 9.5	APRIL 11.9 10.6 10.3 10.7 10.3 9.3 9.1 9.2 8.6 8.8 8.6 8.9 9.7 9.7 10.1 10.1 9.5 8.5	12.0 11.7 10.6 11.0 10.7 9.9 9.8 9.6 9.4 9.7 10.1 9.8 9.8 9.8 10.5 10.3 9.9 8.9	9.5 9.2 9.4 9.7 9.6 9.1 8.5 8.1 8.3 8.4 8.3 8.2 8.1 8.3 8.3	MAY 8.9 8.8 9.1 9.2 8.9 8.0 8.0 8.1 8.2 8.1 8.0 7.9 7.9 8.0 8.1 8.1 8.2	9.2 9.0 9.3 9.5 9.2 e8.8 8.2 8.1 8.2 8.2 8.2 8.0 8.0 8.1 8.2
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1 2 3 4 4 5 6 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	 15.3 15.8 15.6 15.7 16.0 15.7 16.1 14.9 16.1 15.9 14.7 13.4	FEBRUARY 14.0 13.7 14.8 15.0 15.3 15.1 14.1 13.5 14.2 15.1 14.5 12.9 12.4	 14.6 14.7 15.2 15.3 15.6 15.5 14.8 14.2 15.2 15.5 14.0 13.0	16.5 16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7 14.3 13.9 14.0 14.2 13.8 13.1 13.3	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.2 14.1 13.8 13.4 13.5 12.5 12.5 12.5 12.5	16.4 16.3 15.4 14.5 14.2 14.1 14.5 14.4 14.1 13.6 13.8 13.9 12.8 12.8 12.8 12.8	12.1 12.1 10.9 11.4 11.0 10.3 10.6 10.4 10.9 9.8 9.3 10.1 10.0 10.1 10.7 10.5 10.1 9.5 8.6 8.5 9.3 9.2 9.1	APRIL 11.9 10.6 10.3 10.7 10.3 9.3 9.1 9.2 8.6 8.8 8.6 8.9 9.7 9.7 10.1 10.1 9.5 8.5 7.5 7.5 8.4 8.7 8.4	12.0 11.7 10.6 11.0 10.7 9.9 9.8 9.6 9.4 9.7 10.1 9.8 9.8 10.5 10.3 9.9 8.9 8.9 8.9 8.0 8.8 9.0 8.8	9.5 9.2 9.4 9.7 9.6 9.1 8.5 8.1 8.3 8.4 8.3 8.2 8.1 8.3 8.3 8.3 8.9 9.1 8.8	MAY 8.9 8.8 9.1 9.2 8.9 8.0 8.0 8.1 8.2 8.1 8.0 7.9 8.0 8.1 8.1 8.2 8.5 8.6 8.6 8.6	9.2 9.0 9.3 9.5 9.2 e8.8 8.2 8.1 8.2 8.2 8.3 8.2 8.3 8.2 8.3 8.3 8.4 8.5 8.7 8.8 8.7 8.8 8.7 8.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	 15.3 15.8 15.6 15.7 16.0 15.7 15.1 14.9 16.1 15.9 15.7 14.7	FEBRUARY 14.0 13.7 14.8 15.0 15.3 15.1 14.1 13.5 14.2 15.1 14.5 12.9 12.4	 14.6 14.7 15.2 15.3 15.6 15.5 14.8 14.2 15.2 15.5 14.0 13.0	16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7 14.3 13.9 14.0 14.2 13.8 13.1 13.3 13.6 12.6 13.0	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.2 14.1 13.8 13.4 13.5 12.9 12.5 12.5 12.5	16.4 16.3 15.4 14.5 14.2 14.1 14.5 14.4 13.6 13.8 13.9 13.4 12.8 12.8 12.5 12.6	12.1 12.1 10.9 11.4 11.0 10.3 10.6 10.4 10.9 9.8 9.3 10.1 10.3 10.1 10.3 10.1 10.5 10.1 10.7 10.5 10.1 9.5	APRIL 11.9 10.6 10.3 10.7 10.3 9.3 9.1 9.2 8.6 8.8 8.6 8.9 9.8 9.7 9.7 10.1 10.1 9.5 8.5 7.5 7.5 8.4 8.7 8.4	12.0 11.7 10.6 11.0 10.7 9.9 9.8 9.6 9.4 9.0 9.7 10.1 9.8 9.8 10.5 10.3 9.9 8.9 8.2 8.0 8.8 9.0 8.8	9.5 9.2 9.4 9.7 9.6 9.1 8.5 8.1 8.3 8.4 8.4 8.3 8.2 8.3 8.1 8.2 8.3 8.6 8.8 8.9 9.1 8.8	MAY 8.9 8.8 9.1 9.2 8.9 8.0 8.0 8.1 8.2 8.1 8.0 7.9 8.0 8.1 8.1 8.6 8.6 8.6	9.2 9.0 9.3 9.5 9.2 e8.8 8.2 8.1 8.2 8.3 8.2 8.3 8.2 8.3 8.4 8.5 8.7 8.8 8.7 8.8 8.7 8.8 8.7 8.8 8.7 8.8 8.7 8.8 8.9 8.7 8.9 8.9 8.9 8.9 8.9 8.9 8.9 8.9
1 2 3 4 4 5 6 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	 15.3 15.8 15.6 15.7 16.0 15.7 16.1 15.9 16.1 15.9 16.1 12.8 15.9	FEBRUARY 14.0 13.7 14.8 15.0 15.3 15.1 14.1 13.5 14.2 15.1 14.5 12.9 12.4 11.8 12.0 15.9	 14.6 14.7 15.2 15.3 15.6 15.5 14.8 14.2 15.5 15.5 14.0 13.0	16.5 16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7 14.3 13.9 14.0 14.2 13.8 13.1 13.3 13.6 13.6 13.6 13.6 13.0	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.1 13.8 13.4 13.5 12.5 12.5 12.5 12.5 12.5 13.3 12.5 13.2	16.4 16.3 15.4 14.5 14.2 14.1 14.5 14.4 14.1 13.6 13.8 13.9 12.8 12.8 12.8 12.8 12.8 13.4 12.8 12.5 12.6	12.1 12.1 10.9 11.4 11.0 10.3 10.6 10.4 10.9 9.8 9.3 10.1 10.0 10.1 10.5 10.1 9.5 8.6 8.5 9.3 9.2 9.1	APRIL 11.9 10.6 10.3 10.7 10.3 9.3 9.1 9.2 8.6 8.8 8.6 8.9 9.7 9.7 10.1 10.1 9.5 8.5 7.5 7.5 8.4 8.7 8.4 8.4 8.1 8.2 8.5	12.0 11.7 10.6 11.0 10.7 9.9 9.8 9.6 9.4 9.0 9.7 10.1 9.8 9.8 10.5 10.3 9.9 8.9 8.9 8.9 8.9 8.9 8.9 8.9 8.8 9.0 8.8 9.0 8.8 8.8 9.0 8.8 8.8 8.8 8.8 8.8 8.8 8.8 8.8 8.8 8	9.5 9.2 9.4 9.7 9.6 9.1 8.5 8.1 8.3 8.4 8.3 8.2 8.1 8.3 8.3 8.3 8.3 8.6 8.8 9.1 8.8	MAY 8.9 8.8 9.1 9.2 8.9 8.0 8.0 8.1 8.0 7.9 7.9 8.0 8.1 8.1 8.2 8.5 8.6 8.6 8.4 8.4 8.4 8.4	9.2 9.0 9.3 9.5 9.2 e8.8 8.2 8.1 8.2 8.2 8.3 8.2 8.3 8.4 8.5 8.7 8.8 8.9 8.7 8.5 8.5 8.5 8.5 8.5
1 2 2 3 4 4 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	 15.3 15.8 15.6 15.7 16.0 15.7 14.9 16.1 15.9 15.7 14.7	FEBRUARY 14.0 13.7 14.8 15.0 15.3 15.1 14.1 13.5 14.2 15.1 14.5 12.9 12.4 11.8 12.0 15.9	 14.6 14.7 15.2 15.3 15.6 15.5 14.8 14.2 15.2 15.5 15.0 14.0 13.0 12.0 14.5 16.3	16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7 14.3 13.9 14.0 14.2 13.8 13.1 13.3 13.6 12.6 13.0	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.2 14.1 13.8 13.4 13.5 12.5 12.5 12.5 12.5	16.4 16.3 15.4 14.5 14.2 14.1 14.5 14.4 11.3 13.6 13.8 13.9 13.4 12.8 12.8 13.4 12.8	12.1 12.1 10.9 11.4 11.0 10.3 10.6 10.4 10.9 9.8 9.3 10.1 10.3 10.1 10.3 10.1 10.5 10.1 10.7 10.5 10.1 9.5 8.6 8.5 9.3 9.2 9.1	APRIL 11.9 10.6 10.3 10.7 10.3 9.3 9.1 9.2 8.6 8.8 8.6 8.9 9.8 9.7 9.7 10.1 10.1 9.5 8.5 7.5 7.5 8.4 8.7 8.4 8.4 8.4 8.4 8.1 8.2	12.0 11.7 10.6 11.0 10.7 9.9 9.8 9.6 9.4 9.0 9.7 10.1 9.8 9.8 10.5 10.3 9.9 8.9 8.2 8.0 8.8 9.0 8.8	9.5 9.2 9.4 9.7 9.6 9.1 8.5 8.1 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.6 8.8 8.9 9.1 8.0 9.1 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9	MAY 8.9 8.8 9.1 9.2 8.9 8.0 8.1 8.2 8.1 8.0 7.9 8.0 8.1 8.1 8.2 8.5 8.6 8.6 8.4 8.4	9.2 9.0 9.3 9.5 9.2 e8.8 8.2 8.1 8.2 8.3 8.2 8.3 8.2 8.3 8.4 8.5 8.7 8.8 8.7 8.8 8.7 8.8 8.7 8.8 8.7 8.8 8.7 8.8 8.9 8.7 8.9 8.9 8.9 8.9 8.9 8.9 8.9 8.9
1 2 3 4 4 5 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	 15.3 15.8 15.6 15.7 16.0 15.7 16.1 14.9 16.1 15.9 15.7 14.7 13.4	FEBRUARY 14.0 13.7 14.8 15.0 15.3 15.1 14.1 13.5 14.2 15.1 14.5 12.9 12.4 11.8 12.0 15.9	 14.6 14.7 15.2 15.3 15.6 15.5 14.2 15.5 15.0 14.0 13.0 12.0 14.5 16.3	16.5 16.5 16.5 16.1 15.3 14.3 14.2 14.6 14.7 14.3 13.9 14.0 14.2 13.8 13.1 13.3 13.6 12.6 12.6 13.0 	MARCH 16.3 16.1 15.1 14.0 14.1 14.0 14.1 13.8 13.4 13.5 12.5 12.5 12.5 12.5 12.5 13.3 12.5 12.5 12.1 13.8 13.4 13.8 13.4 13.8 13.4 13.8 13.4 13.8 13.4 13.8 13.8 13.8 13.8 13.8 13.8 13.8 13.8	16.4 16.3 15.4 14.5 14.2 14.1 14.5 14.4 14.1 13.6 13.8 13.9 12.8 12.8 13.4 12.8 13.2 12.5 12.5	12.1 12.1 10.9 11.4 11.0 10.3 10.6 10.4 10.9 9.8 9.3 10.1 10.3 10.1 10.7 10.5 10.1 9.5 8.6 8.5 9.3 9.2 9.1	APRIL 11.9 10.6 10.3 10.7 10.3 9.3 9.1 9.2 8.6 8.8 8.6 8.9 9.7 9.7 10.1 10.1 10.1 9.5 8.5 7.5 7.5 8.4 8.7 8.4 8.4 8.4 8.4 8.8 8.6 8.9	12.0 11.7 10.6 11.0 10.7 9.9 9.8 9.6 9.4 9.0 9.7 10.1 9.8 9.8 10.5 10.3 9.9 8.9 8.2 8.0 8.8 9.0 8.8	9.5 9.2 9.4 9.7 9.6 9.1 8.5 8.1 8.3 8.4 8.3 8.2 8.1 8.2 8.3 8.3 8.4 8.3 8.4 8.3 8.4 8.5 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6	MAY 8.9 8.8 9.1 9.2 8.9 8.0 8.0 8.1 8.2 8.1 8.0 7.9 8.0 8.1 8.1 8.2 8.6 8.6 8.4 8.4 8.4 8.4 8.3	9.2 9.0 9.3 9.5 9.2 e8.8 8.2 8.1 8.2 8.3 8.2 8.3 8.2 8.3 8.3 8.4 8.5 8.5 8.5 8.5

06887500 KANSAS RIVER AT WAMEGO, KS--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBE	R
1 2 3 4 5	8.4 8.1 8.5 8.4 8.8	7.5 7.6 8.0 8.2 7.8	7.8 7.9 8.3 8.3	7.9 8.0 8.0 8.0	7.7 7.8 7.8 7.8 7.4	7.8 7.9 7.9 7.9 7.7	7.1 6.6 6.4 6.4 6.5	6.2 6.2 6.2 6.1 6.2	6.6 6.5 6.3 6.3	9.1 8.9 9.4 11.0 13.1	8.4 8.7 8.7 8.7 8.6	8.8 8.8 9.0 9.6 10.4
6 7 8 9 10	8.8 8.4 8.8 9.0 8.9	8.4 7.3 7.3 8.8 8.7	8.7 7.7 8.3 8.9 8.8	7.4 7.3 7.2 7.6 8.1	7.2 6.9 6.7 6.8 6.8	7.3 7.1 6.9 7.1 7.3	6.8 7.4 7.9 7.7 8.2	6.3 6.6 7.0 6.9 7.2	6.6 7.0 7.3 7.3 7.6	13.1 12.3 12.1 12.1	8.2 8.0 7.9 8.3	10.2 9.7 9.6 10.0
11 12 13 14 15	8.9 8.8 8.8 8.7	8.6 8.5 8.5 8.4	8.7 8.7 8.7 8.6 8.6	8.5 8.6 9.9 10.9	7.0 7.3 7.8 7.9 7.9	7.7 7.9 8.7 9.2 9.1	8.6 8.7 8.5 9.3 8.9	7.3 7.1 7.0 7.1 7.2	7.9 7.9 7.6 8.0 7.8	 8.7	 7.7	 8.1
16 17 18 19 20	8.6 8.8 8.7 8.5 7.8	8.4 7.6 8.3 7.7 6.7	8.5 8.4 8.5 8.0 7.4	11.0 11.0 11.1 9.8 9.2	8.1 7.6 7.4 7.3 6.3	9.3 9.1 8.9 9.0 7.6	9.5 9.6 9.9 10.4 11.2	7.3 7.2 7.3 7.4 7.4	8.2 8.1 8.5 8.7 9.0	8.5 8.1 7.7 7.9	7.8 7.6 7.3 7.4	8.1 7.8 7.6 e7.7
21 22 23 24 25	7.0 7.6 7.7 7.8 8.0	6.6 6.6 7.5 7.6 7.8	6.9 7.2 7.6 7.7 7.9	9.1 9.0 7.9 8.9 9.2	6.4 6.3 6.3 6.6 6.4	7.6 7.5 7.0 7.6 7.6	10.5 10.7 10.5 7.9 7.6	7.2 7.3 7.3 6.7 5.0	8.6 8.6 8.5 7.3 6.9	8.5 8.8 9.1 9.3	8.0 8.3 8.8 9.1	8.2 8.6 9.0 9.2
26 27 28 29 30 31	8.1 8.1 8.0 7.8 7.9	7.9 8.0 7.6 7.6 7.7	8.0 8.1 7.8 7.7 7.8	8.5 9.6 10.9 11.8 10.7 7.5	6.5 6.7 6.6 6.4 6.2 5.8	7.4 7.8 8.1 8.5 8.2 6.6	6.5 6.9 7.1 8.7 9.2 8.7	4.9 6.5 6.7 6.9 7.8 8.0	5.8 6.8 6.9 7.4 8.5 8.3	9.5 9.6 9.6 10.1 10.2	9.2 9.4 9.4 9.4 10.0	9.4 9.5 9.5 9.8 10.1
MONTH	9.0	6.6	8.1	11.8	5.8	7.9	11.2	4.9	7.5	13.1	7.3	9.1
YEAR	17.1	4.9	10.1									

e Estimated

MONTH

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 20 MAX MIN DAY MIN MEAN MAX MIN MEAN MAX MIN MEAN MAX MEAN OCTOBER NOVEMBER DECEMBER JANUARY 3 4 19 --------e22 22 19 17 12 13 ------------21 12 17 33 ------------------------------25 27 27 ------------------___ ___ ___ ---___ ------------------23 21 23 21 22 23 24 25 17 ___ ---------37 27 30 ------29 30 17 ___

06887500 KANSAS RIVER AT WAMEGO, KS--Continued

e Estimated

> Actual value is known to be greater than the value shown

06888350 KANSAS RIVER NEAR BELVUE, KS

LOCATION.--Lat $39^{\circ}11^{\circ}15^{\circ}$, long $96^{\circ}08^{\circ}50^{\circ}$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.13, T.10 S., R.11 E., Wabaunsee County, Hydrologic Unit 10270102, on left bank at downstream side of county highway bridge, 3.5 mi southeast of Belvue, 1.3 mi downstream from Wells Creek, 6.4 mi down-stream from Vermillion Creek, and at mile 115.0.

DRAINAGE AREA.--55,870 mi², of which a large area is probably noncontributing.

PERIOD OF RECORD. -- October 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 925.54 ft above sea level.

REMARKS.--Records poor. Natural flow affected by lakes and reservoirs in Colorado, Nebraska, and Kansas, and by numerous diversions upstream from station. Satellite telemeter at station.

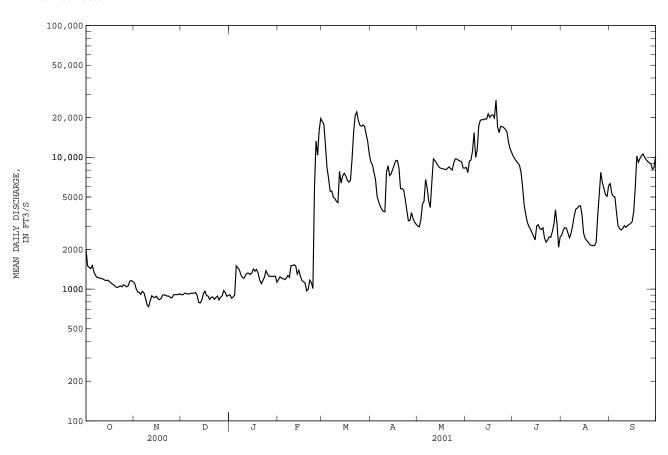
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES

DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG 1 e2000 1110 905 e905 1180 18700 9250 e3010 e8380 e10200 2570 2 e1500 1010 908 e853 1240 17800 8780 e2970 e7660 e9720 2810	SEP 6320 5310 5070 4990 3840
2 e1500 1010 908 e853 1240 17800 8780 e2970 e7660 e9720 2810	5310 5070 4990
2 e1500 1010 908 e853 1240 17800 8780 e2970 e7660 e9720 2810	5310 5070 4990
	5070 4990
3 1460 951 929 e871 e1210 12400 7670 e3380 e9360 e9370 2930	4990
4 1430 944 928 e903 1200 8360 6780 e4400 e9530 e9030 2900	3840
5 1510 912 918 e1500 1180 6920 5070 e4640 e11200 e8710 2660	
6 1360 962 918 e1450 1210 5530 4600 e6780 e15400 e7700 2450	3020
7 1270 938 931 e1400 1270 5560 4260 e5870 e10000 e5980 2660	2880
8 1230 854 928 e1280 1230 5000 4040 e4660 e11400 e4350 3040	2810
9 1220 759 932 e1220 1510 4870 3890 e4170 e17400 e3690 3600	2880
10 1210 736 e941 e1210 e1510 4640 3860 e6480 e19100 e3220 4040	3030
10 1210 750 6741 61210 61510 4040 5000 60400 615100 63220 4040	3030
11 1200 814 e896 e1280 e1530 4530 7670 e9730 e19300 e2990 4120	2940
12 1190 889 e791 e1320 e1500 7820 8640 e9450 e19300 e2850 4270	3040
13 1170 869 e786 e1320 e1300 6380 7270 e9030 e19600 e2680 4290	3080
14 1160 864 e825 e1290 1390 7210 7490 e8630 e19500 e2520 3620	3150
15 1170 883 e923 e1330 1250 7570 8130 e8340 e21400 e2360 2650	3240
13 1170 003 6723 61330 1230 7370 0130 60340 621400 62300 2030	3240
16 1140 842 e967 e1420 1160 7220 8770 e8240 e20100 e3010 2420	3870
17 1110 831 e892 e1370 1140 6710 9460 e8180 e20900 3080 2340	5870
18 1090 853 e886 e1410 1110 6480 9470 e8150 e21000 2880 2260	10200
19 1070 901 e836 e1320 969 6700 8250 e8050 e19900 2830 2180	9160
20 1040 904 e868 e1170 1000 9660 5770 e8240 e27100 2920 2140	9810
20 1040 904 6000 61170 1000 9000 5770 60240 627100 2920 2140	2010
21 1030 896 e871 e1100 1170 15400 e5790 e8460 e17100 2440 2140	10300
22 1040 884 e837 e1160 1120 20700 e5650 e8200 e15400 2270 2140	10600
23 1060 885 e864 e1230 1010 22100 e4810 e8000 e17200 2360 2260	e10000
24 1040 862 e885 e1380 5870 19100 e3960 e9050 e17100 2490 3590	9590
25 1080 860 e828 e1300 13300 17500 e3300 e9730 e16800 2470 5260	9300
23 1000 000 6020 61300 13300 17300 63300 69730 610000 2470 3200	9300
26 1060 906 e868 e1250 10400 17200 e3320 e9700 e16300 2730 7680	9090
27 1040 908 e889 e1250 16100 17600 e3810 e9500 e15600 3110 6420	8920
28 1060 908 e976 e1250 19700 17200 e3420 e9360 e13000 3990 5780	8140
29 1150 908 e939 e1250 15000 e3220 e9260 e11600 3130 5200	8350
30 1160 923 e882 e1250 13200 e3100 e10900 2080 5060	10200
31 1140 e896 e1130 10600 e8290 2490 6120	
51 1170 6090 61130 10000 60290 2490 6120	
MEAN 1206 892 892 1238 3349 11150 5983 7427 15950 4182 3600	6300
MAX 2000 1110 976 1500 19700 22100 9470 9730 27100 10200 7680	10600
MIN 1030 736 786 853 969 4530 3100 2970 7660 2080 2140	2810
AC-FT 74160 53090 54830 76110 186000 685600 356000 456700 949200 257200 221400	374900

06888350 KANSAS RIVER NEAR BELVUE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	I FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN 4871 3999 MAX 23260 21070 (WY) 1987 1999 MIN 756 651 (WY) 1985 1992	4408 2696 10790 7497 1993 1994 567 653 1992 1992	15650 1993 674	5931 24150 1993 838 1991	8567 32300 1987 846 1989	11940 31800 1995 869 1992	11420 42050 1995 1441 1989	11910 72370 1993 1385 1991	9095 57370 1993 1472 1988	5420 35230 1993 680 1991
SUMMARY STATISTICS	FOR 2000 C	LENDAR YEAR	1	FOR 2001	WATER YEAR		WATER Y	TEARS 1983	3 - 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS	2482 12400 733 826 1801000 407 2380	Mar 27 Nov 10 Nov 8		5173 27100 736 826 33000 14. 736 3745000 12600 2990 902	Jun 20 Nov 10 Nov 8 Jun 20 60 Jun 20 Nov 10		7074 25330 1798 167000 390 478 170000 26.0 390 5125000 18100 3460 950	Jan Jan Jul 10 Jul	1993 1991 26 1993 14 1992 14 1992 26 1993 26 1993 16 1992



06888500 MILL CREEK NEAR PAXICO, KS

LOCATION.--Lat $39^{\circ}03^{\circ}44^{\circ}$, long $96^{\circ}10^{\circ}52^{\circ}$, in SW $^{1}/_{4}$ NE $^{1}/_{4}$ SW $^{1}/_{4}$ sec.27, T.11 S., R.11 E., Wabaunsee County, Hydrologic Unit 10270102, on right bank between bridges of Interstate Highway 70, 1.0 mi southwest of Paxico, 2.0 mi downstream from Kuenzli Creek, and at mile 16.0.

DRAINAGE AREA. -- 316 mi².

PERIOD OF RECORD. -- December 1953 to current year.

REVISED RECORDS. -- WSP 1560: 1954, 1957.

GAGE.--Water-stage recorder. Datum of gage is 964.92 ft above sea level. Prior to Apr. 15, 1958, nonrecording gage at same site and datum.

REMARKS.--Records good. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum known stage since at least 1935, 34.7 ft July 12, 1951, from floodmarks, discharge, $77,200 \text{ ft}^3/\text{s}$, from contracted-opening measurement of peak flow.

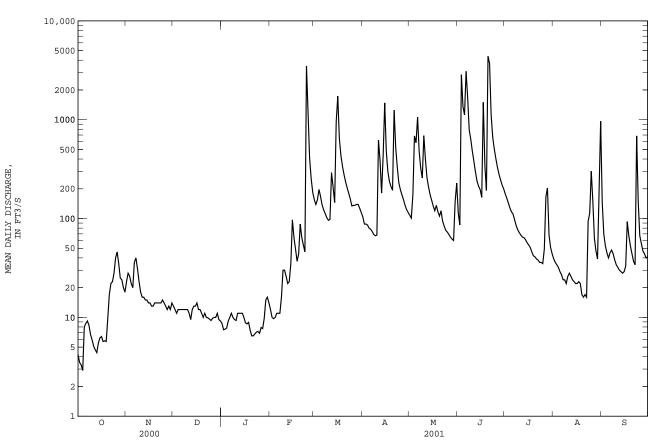
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum (*):

				_	_		_					
Date	Tim	e	Discharge (ft ³ /s)	Gag	ge height (ft)		Date	Time	2	Discharge (ft ³ /s)		height ft)
Feb 24 Mar 15 Apr 15 Apr 21 Jun 3	161 233 040 060 130	0 0 0	8,300 3,950 2,650 2,700 7,140		17.56 11.19 8.99 9.08 15.75		Jun 6 Jun 17 Jun 20 Jun 21 Aug 31	150 050 110 080 010	0 0 0	7,000 4,800 *10,000 8,340 4,060	1: *1: 1'	5.57 2.50 9.26 7.28 1.37
		DISCHA	ARGE, CUBIC	FEET PI		WATER YE Y MEAN VA		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	4.2 3.5 3.3 2.9 8.0	23 28 26 22 20	13 12 11 12 12	8.7 7.5 7.6 7.8 9.2	12 10 9.7 10	155 139 155 197 167	104 88 88 86 80	108 101 174 685 583	114 86 2850 1360 1120	178 161 144 128 117	39 36 34 32 29	146 70 53 45 40
6 7 8 9 10	8.7 9.2 8.3 6.7 5.9	36 40 31 23 18	12 12 12 12 12	10 11 10 9.5 9.3	11 11 16 30 30	137 122 112 102 96	78 74 69 67 68	1060 482 324 257 691	3090 1680 788 633 478	111 97 85 77 72	27 24 24 22 26	45 48 44 38 34
11 12 13 14 15	5.1 4.7 4.4 5.5 6.2	16 16 15 15 14	11 9.5 12 13 13	11 11 11 11 10	26 22 23 35 97	98 291 209 145 954	623 389 181 435 1480	400 259 209 174 153	379 295 239 212 196	68 65 64 61 57	28 26 24 23 22	32 30 29 28 29
16 17 18 19 20	6.4 5.7 5.8 5.7 9.7	14 13 13 14 14	14 12 12 11 10	8.8 8.6 8.9 7.4 6.5	64 49 37 44 88	1730 649 435 338 278	481 299 238 211 193	134 120 136 117 106	164 1500 346 192 4390	54 51 46 42 41	22 23 22 17 16	33 93 67 53 44
21 22 23 24 25	17 22 23 28 40	14 14 14 15 14	11 10 9.9 9.6 9.3	6.5 6.8 7.1 7.2 6.9	64 54 46 3500 1180	235 204 180 158 134	1250 529 335 231 196	120 94 84 76 73	3720 1130 670 507 407	39 38 36 36 35	17 16 94 113 301	37 34 686 150 67
26 27 28 29 30 31	46 35 25 24 20 18	13 12 13 12 14	9.8 10 10 11 9.5 9.2	7.9 7.7 9.8 15 16 14	409 253 184 	136 136 139 139 127 115	174 155 136 123 115	69 65 62 60 148 228	332 282 247 219 200	49 166 204 68 51 44	150 63 47 39 190 965	56 47 44 40 41
MEAN MAX MIN MED AC-FT	13.5 46 2.9 8.0 829	18.2 40 12 14 1080	11.2 14 9.2 11 688	9.35 16 6.5 8.9 575	226 3500 9.7 36 12550	265 1730 96 155 16290	286 1480 67 178 17010	237 1060 60 136 14580	928 4390 86 393 55190	80.2 204 35 64 4930	81.0 965 16 27 4980	73.4 686 28 44 4370

06888500 MILL CREEK NEAR PAXICO, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG SEP
MEAN 153 121 MAX 1179 1108 (WY) 1986 1999 MIN .000 .000 (WY) 1957 1957	99.9 82.3 668 382 1974 1974 .000 .000 1957 1957	139 611 1973 .000 1957	256 1325 1973 .97 1957	329 1680 1999 1.51 1954	387 2895 1995 3.05 1989	326 1653 1967 1.89 1989	195 2136 1993 1.82 1956	81.2 117 535 1954 1968 1973 .055 .040 1955 1956
SUMMARY STATISTICS	FOR 2000 CALEN	DAR YEAR	FO	R 2001 WAT	ER YEAR		WATER YEAR	RS 1954 - 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS	46.2 2630 2.9 3.3 33540 84 19	Jun 20 Oct 4 Sep 14		4390 2.9 5.4 10000 19.26 2.8 133100 393 44 9.2	Jun 20 Oct 4 Oct 11 Jun 20 Jun 20 Oct 4		194 634 7.02 21700 .00 42200 32.21 .00 140200 335 54 4.4	1993 1956 May 17 1995 Sep 22 1954 Sep 22 1954 Sep 26 1973 Sep 26 1973 at times



06889000 KANSAS RIVER AT TOPEKA, KS

LOCATION.--Lat $39^{\circ}04^{\circ}00^{\circ}$, long $95^{\circ}38^{\circ}58^{\circ}$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.28, T.11 S., R.16 E., Shawnee County, Hydrologic Unit 10270102, on right bank at downstream side of Sardou Bridge in Topeka, 2.3 mi upstream from Soldier Creek (diversion channel), and at mile 83.1.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--56,720 mi^2 , approximately, of which a large area is probably noncontributing.

PERIOD OF RECORD.--April to August 1904 (gage heights only), June 1917 to current year. Gage-height records for this vicinity since August 1904 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS. -- WSP 806: Drainage area. WSP 1310: 1920(M), 1922(M).

GAGE.--Water-stage recorder. Datum of gage is 846.66 ft above sea level. Feb. 28, 1961, to Sept. 30, 1988, gage datum was 5.00 ft higher. Prior to Feb. 28, 1961, recording or nonrecording gages at several sites within 8,000 ft of present site at various datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by reservoirs in Colorado, Nebraska, and Kansas, and by numerous diversions upstream from station. Satellite telemeter at station.

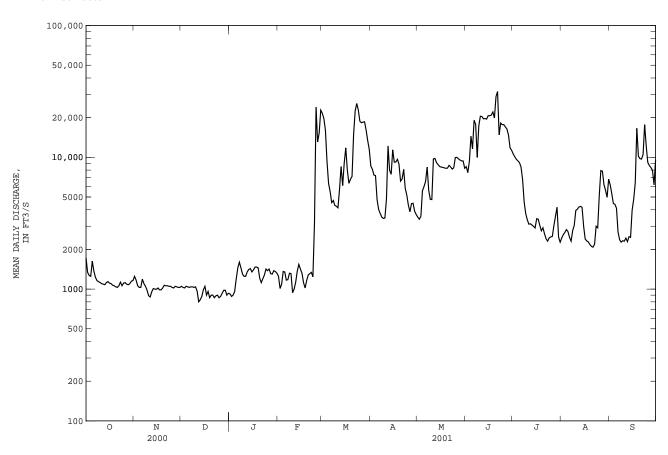
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 30, 1903 (second highest since 1844) reached a stage of about 37 ft, present site and datum, from floodmarks at site 5,900 ft upstream, discharge, about 300,000 ft³/s. A flood in the spring of 1844 is known to have been higher than that of 1903.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP e920 e880 e900 e960 e1200 e1450 e1600 17300 e1450 e1300 e1250 e1250 7440 e880 e990 e1050 e900 e960 e860 e900 e900 e860 e900 e860 e880 e930 e980 e980 e900 ---e930 ME AN MAX MIN AC-FT

06889000 KANSAS RIVER AT TOPEKA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	4386 42320 1974 348 1957	3420 35190 1974 406 1957	2762 16140 1974 383 1957	2215 11280 1974 328 1957	3512 16720 1949 500 1957	5498 27610 1973 492 1967	7074 32500 1987 650 1956	8720 36010 1995 585 1956	11880 64670 1951 1075 1989	9717 109100 1951 986 1936	5754 55350 1993 269 1934	5341 34840 1951 425 1956
SUMMARY	STATIST	ICS	FOR	2000 CALE	ENDAR YEAR		FOR 2001	WATER YEAR		WATER Y	YEARS 1918	3 - 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT ANNUAL	CANNUAL MAINUAL MEDAILY MEDAILY ME	EAN EAN AN Y MINIMUM OW AGE OW FLOW AC-FT)		2452 11700 801 881 1780000 4320	Mar 28 Dec 12 Dec 19		31600 801 881 44800 19. 627 3996000	Jun 21 Dec 12 Dec 19 Jun 21 74 Jun 21 Dec 12		5903 25580 1138 458000 170 183 469000 40.8 112 4276000 13700	Oct Oct Jul 30 Jul	1993 1956 13 1951 11 1956 7 1956 13 1951 13 1951 16 1940
50 PERC	CENT EXCE	EDS		2220 1030			2990 1020			2670 888		



06889000 KANSAS RIVER AT TOPEKA, KS--Continued

WATER-OUALITY RECORDS

PERIOD OF RECORD. -- July 1999 to current year.

PERIOD OF DAILY RECORD. --

SPECIFIC CONDUCTANCE: July 1999 to current year. pH: July 1999 to current year. WATER TEMPERATURE: July 1999 to current year. DISSOLVED OXYGEN: July 1999 to current year. TURBIDITY: July 1999 to current year.

INSTRUMENTATION. -- Multiparameter water-quality monitor.

REMARKS.--Records good except those for periods of missing records. Interruptions in record are due to ice conditons or malfunction of the recording instrument or sensors. Instruments used to measure trubidity conform to ISO 7027 standards.

EXTREMES FOR PERIOD OF RECORD .--

SPECIFIC CONDUCTANCE: Maximum, 1,630 microsiemens/cm, Oct. 26, 1999; minimum, 189 microsiemens/cm, Aug. 17, 2000. pH: Maximum, 9.4 standard units, Aug. 31, 2000; minimum, 7.0 standard units, July 5, 2000. WATER TEMPERATURE: Maximum, 33.4 °C, July 14, 2000; minimum, 0.0 °C, Feb. 25, 2001. DISSOLVED OXYGEN: Maximum 17.4 mg/L, Sept. 30, 1999; minimum, 4.6 mg/L, June 21, 2000. TURBIDITY: Maximum, >1,600 NTU, July 4, 2000; minimum, 8 NTU, Jan. 22, 2001.

EXTREMES FOR CURRENT YEAR.-SPECIFIC CONDUCTANCE: Maximum, 1,300 microsiemens/cm, Nov. 12; minimum, 275 microsiemens/cm, Sept. 18.

SPECIFIC CONDUCTANCE: Maximum, 1,300 microsstemens/cm, NoV. 12. minimum, 2/5 mic. pH: Maximum, 9.3 standard units, Aug. 19; minimum, 7.8 standard units, June 21. WATER TEMPERATURE: Maximum, 33.2 °C, Aug. 5; minimum, 0.0 °C, Feb. 25. DISSOLVED OXYGEN: Maximum, 16.4 mg/L, Feb. 22; minimum, 6.3 mg/L, July 29. TURBIDITY: Maximum, >1,600 ntu, Aug. 27; minimum, 8 ntu, Jan. 22.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		N	OVEMBER		D	ECEMBER			JANUARY	7
1	796	769	774	1140	955	1070	1150	1130	1140			
2	909	796	858	1060	1020	1030	1160	1150	1150			
3	947	909	934	1020	992	1010	1170	1150	1160			
4	965	937	954	1080	997	1030	1160	1130	1140			
5	951	805	e884	1120	1060	1100	1150	1120	1130			
6	927	874	910	1090	797	975	1150	1120	1140			
7	986	925	965	1090	1020	1070	1130	1110	1120			
8	1030	986	1020	1090	1070	1080	1120	1110	1120			
9	1060	1030	1050	1110	1070	1100	1130	1120	1130			
10	1070	1050	1060	1220	1100	1150	1140	1130	1130			
10	1070	1030	1000	1220	1100	1130	1140	1130	1130			
11	1100	1070	1080	1300	1220	1270	1170	1140	e1160			
12	1120	1090	1100	1300	1210	1260						
13	1110	1080	1090	1210	1140	1180						
14	1080	813	1040	1140	1130	1130						
15	1030	813	995	1140	1130	1130						
16	971	910	952	1140	1130	1130						
17	949	889	926	1140	1140	1150						
18	988	902	962	1160	1150	1150				1160	1110	1140
19	960	902	943	1160	1140	1150				1170	1100	1130
20	958	938	948	1160	1140	1150				1190	1140	1170
21	1000	953	977	1150	1130	1140				1210	1150	1190
22	1020	971	1010	1140	1130	1130				1150	1080	1120
23	1030	865	964	1130	1120	1130				1080	989	1030
24	1020	984	1010	1140	1130	1130				1040	992	1020
25	1020	947	980	1140	1120	1130						
26	1000	961	988	1120	1090	1110						
27	1020	1000	1010	1090	1030	1050						
28	1040	1000	1020	1070	1030	1050						
29	1050	1030	1040	1110	1070	1090						
30 31	1120	1040	1080	1130	1110	1120						
31	1130	1110	1120									
MONTH	1130	769	989	1300	797	1110	1170	1110	1140	1210	989	1110

06889000 KANSAS RIVER AT TOPEKA, KS--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	 	 		518 517 513 491 521	488 498 483 471 471	504 507 494 480 492	481 481 487 567 623	443 474 479 427 431	469 477 482 491 521	768 805 818 770 642	704 768 756 546 580	735 789 802 679 617
6 7 8 9 10	 1080 1180	 945 1050	 1020 1110	516 635 695 763 765	509 515 635 695 760	512 554 661 736 763	698 728 758 769 767	623 698 728 758 736	671 714 740 765 760	672 618 659 736 762	618 479 558 659 735	651 512 619 699 748
11 12 13 14 15	1150 1100 1100 1000 1070	1050 1020 1000 961 982	1100 1060 1050 978 1040	772 760 543 750 749	754 537 432 541 536	762 733 480 639 670	760 591 498 524 551	591 362 430 454 430	738 424 474 507 483	771 722 631 544 557	592 631 528 523 541	652 691 561 531 547
16 17 18 19 20	1150 1220 1240 1220 1130	1070 1150 1200 1130 1080	1120 1190 1220 1180 1100	541 606 618 669 584	485 516 602 584 430	513 561 612 630 491	537 566 518 507 513	463 518 485 481 492	505 539 505 491 503	577 580 587 629 640	556 571 579 584 627	567 576 583 607 634
21 22 23 24 25	1110 1080 1090 963	1050 1040 986 	1090 1050 1070 e870	430 396 407 429 433	362 363 375 397 408	380 381 394 406 418	545 506 566 726 675	427 397 488 566 564	496 450 522 670 604	635 646 653 650 641	622 627 632 637 586	628 635 644 641 596
26 27 28 29 30 31	507 490 	341 379 	422 447 	410 406 403 427 426 443	404 398 394 403 408 421	408 402 399 411 416 425	642 776 823 652 704	611 641 634 603 652	627 664 758 621 684	610 606 571 563 543 585	590 571 560 542 515 523	603 592 564 553 530 560
MONTH	1240	341	1010	772	362	524	823	362	578	818	479	624
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	AUGUST	MEAN	MAX	MIN SEPTEMBI	
DAY 1 2 3 4 5	MAX 812 925 616 518 607		598 648 558 442 533	690 682 649 618 609		688 665 632 612 602	1040 988 843 837 732		959 887 775 752 690		SEPTEMBI	
1 2 3 4	812 925 616 518	JUNE 548 509 518 392	598 648 558 442	690 682 649 618	JULY 682 649 618 609	688 665 632 612	1040 988 843 837	882 764 742 717	959 887 775 752	488 504 500 535	470 484 486 494	478 495 491 512
1 2 3 4 5 6 7 8 9	812 925 616 518 607 519 435 651 650	JUNE 548 509 518 392 479 391 365 435 484	598 648 558 442 533 440 391 528 515	690 682 649 618 609 597 648 789 828	JULY 682 649 618 609 597 590 591 648 789	688 665 632 612 602 592 631 716 810	1040 988 843 837 732 630 603 621 581	882 764 742 717 629 580 579 559 556	959 887 775 752 690 596 587 601 570	488 504 500 535 552 591 724 759 785 765	\$EPTEMBI 470 484 486 494 534 541 591 724 757 702 746 840	478 495 491 512 544 555 670 741 772
1 2 3 4 5 6 7 8 9 10 11 12 13 14	812 925 616 518 607 519 435 651 650 538 506 473 473 473	JUNE 548 509 518 392 479 391 365 435 484 500 466 458 457 454	598 648 558 442 533 440 391 528 515 522 478 466 464 471	690 682 649 618 609 597 648 789 828 871 877 879 841	JULY 682 649 618 609 597 590 591 648 789 828 871 841 797 791	688 665 632 612 602 592 631 716 810 854 875 871 810 797	1040 988 843 837 732 630 603 621 581 580 519 514 510	882 764 742 717 629 580 579 559 556 500	959 887 775 752 690 596 587 601 570 544 514 500 507	488 504 500 535 552 591 724 759 785 765 1010 1000 870 793	470 484 486 494 534 541 591 724 757 702 746 840 793 754	478 495 491 512 544 555 670 741 772 727 881 904 848 767
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	812 925 616 518 607 519 435 651 650 538 506 473 473 491 520 548 562 614	JUNE 548 509 518 392 479 391 365 435 484 500 466 458 457 454 488 498 533 497 529	598 648 558 442 533 440 391 528 515 522 478 466 464 471 501 520 553 535 562	690 682 649 618 609 597 648 789 828 871 877 879 841 800 798 787 732 777 747	JULY 682 649 618 609 597 590 591 648 789 828 871 841 797 791 785 700 577 732 685	688 665 632 612 602 592 631 716 810 854 875 871 810 797 792 763 652 761 708	1040 988 843 837 732 630 603 621 581 580 519 514 510 512 579	882 764 742 717 629 580 579 559 556 500 501 494 503 503 507 579 665 689 726	959 887 775 752 690 596 587 601 570 544 514 500 507 508 530 620 681 701 743	488 504 500 535 552 591 724 759 785 765 1010 1000 870 793 759 787 812 560 435	\$EPTEMBI 470 484 486 494 534 541 591 724 757 702 746 840 793 754 529 495 558 275 314	478 495 491 512 544 555 670 741 772 727 881 904 848 767 694 615 653 354 392
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	812 925 616 518 607 519 435 651 650 538 506 473 473 491 520 548 562 614 576 576 576	JUNE 548 509 518 392 479 391 365 435 484 500 466 458 457 454 488 498 533 497 529 492 376 375 606 610	598 648 558 442 533 440 391 528 515 522 478 466 464 471 501 520 553 535 562 557 407 602 652	690 682 649 618 609 597 648 789 828 871 877 879 841 800 798 787 732 777 747 767	JULY 682 649 618 609 597 590 591 648 789 828 871 841 797 791 785 700 577 732 685 701 671 748 778	688 665 632 612 602 592 631 716 810 854 875 871 810 797 792 763 652 740 707 767 791 803	1040 988 843 837 732 630 603 621 581 580 519 514 510 512 579 665 689 726 752 765	8822 764 742 717 629 580 579 556 500 501 494 503 503 507 579 665 689 726 727 706 513 405 605	959 887 7775 752 690 596 587 570 544 514 500 507 508 530 620 681 743 747 731 730 629 e691	488 504 500 535 552 591 724 759 785 765 1010 1000 870 793 759 787 812 560 435 570 441 473 504 383	529 495 558 275 314 435 420 433 293 333 333	478 495 491 512 544 555 670 741 772 727 881 904 848 767 694 615 653 354 427 459 392
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	812 925 616 518 607 519 435 651 650 538 506 473 473 491 520 548 562 614 576 576 637 630 596 621 638 724 718	JUNE 548 509 518 392 479 391 365 435 484 500 466 458 457 454 488 498 533 497 529 492 376 375 606 610 565 576 587 620 635 689	598 648 558 442 533 440 391 528 515 522 478 466 464 471 501 520 553 535 562 557 407 602 650 621 591	690 682 649 618 609 597 648 789 828 871 877 879 841 800 798 787 732 777 747 767 748 778 799 809 809 788	JULY 682 649 618 609 597 590 591 648 789 828 871 841 797 791 785 700 577 732 685 701 671 748 778 788 788 788 753 747 680 580 540 557	688 665 632 612 602 592 631 716 810 854 875 871 810 797 792 763 652 761 708 740 707 767 791 803 763	1040 988 843 837 732 630 603 621 581 580 519 514 510 512 579 665 689 726 752 765 748 764 713 717 717 717	882 764 742 717 629 580 579 559 556 500 501 494 503 507 579 665 689 727 706 513 405 605 6 392 449 446	959 887 775 752 690 596 587 601 570 544 514 500 507 508 530 620 681 701 733 747 731 730 629 e691 422 483	488 504 500 535 552 591 724 759 785 765 1010 1000 870 793 759 787 812 560 435 570 441 473 504 468 476 509 556	\$EPTEMBI 470 484 486 494 534 541 591 724 757 702 746 840 793 754 529 495 558 275 558 275 314 435 420 433 293 333 3383 401 426 466 476 438	478 495 491 512 544 555 670 741 772 727 881 904 848 767 694 615 653 334 392 505 427 459 395 371 392 411 455 470 492 467

e Estimated

06889000 KANSAS RIVER AT TOPEKA, KS--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN I	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		OCTOBER		I	NOVEMBER			DECEMBER	-		JANUAR	Y
1 2 3 4	8.9 8.9 8.8 8.7	8.7 8.6 8.4 8.3	8.8 8.7 8.5 8.5	8.5 8.8 8.7 8.6	8.5 8.5 8.5	8.4 8.6 8.6 8.6	8.3 8.3 8.5	8.2 8.2	8.3 8.3 8.2 8.2	 		
5 6 7 8 9	8.7 8.8 8.7 8.5 8.4	8.3 8.5 8.5 8.4 8.3	8.6 8.7 8.6 8.4 8.4	8.5 8.5 8.4 8.4	8.4 8.3 8.4 8.3 8.3	8.5 8.4 8.4 8.4 8.3	8.5 8.4 8.4 8.4	8.3 8.3 8.3	8.3 8.4 8.3 8.3		 	
10 11 12 13 14	8.5 8.6 8.8 8.7	8.3 8.4 8.5 8.5	8.4 8.5 8.6 8.6	8.3 8.3 8.4 8.4	8.3 8.3 8.3 8.3	8.3 8.3 8.3 8.3		8.2 				
15 16 17 18 19 20	8.8 8.7 8.7 8.6 8.7 8.7	8.5 8.5 8.5 8.4 8.4	8.6 8.5 8.6 8.5 8.6	8.4 8.4 8.4 8.5 8.4	8.3 8.4 8.3 8.3 8.3	8.3 8.4 8.3 8.3 8.4	 	 	 	 8.6 8.6 8.6	 8.5 8.5 8.5	 8.5 8.6 8.5
21 22 23 24 25	8.6 8.5 8.5 8.5	8.4 8.4 8.2 8.2 8.2	8.5 8.5 8.4 8.3 8.3	8.5 8.5 8.5 8.4 8.3	8.4 8.4 8.3 8.3	8.4 8.4 8.4 8.3	 	 	 	8.5 8.6 8.5 8.5	8.5 8.4 8.4 8.5	8.5 8.5 8.5 8.5
26 27 28 29 30 31	8.3 8.3 8.6 8.8	8.1 8.0 8.1 8.3 8.5	8.2 8.1 8.1 8.4 8.5 8.6	8.3 8.4 8.4 8.4	8.3 8.3 8.3 8.3	8.3 8.3 8.4 8.4	 	 	 	 	 	
MAX MIN	8.9 8.3	8.7 8.0	8.8 8.1	8.8 8.3	8.5 8.3	8.6 8.3	8.5 8.3	8.3 8.2	8.4 8.2	8.6 8.5	8.5 8.4	8.6 8.5
DAY	MAX	MIN I	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
DAY		MIN 1			MIN MARCH	MEDIAN	MAX	MIN APRIL	MEDIAN	MAX	MIN MAY	
DAY 1 2 3 4 5						8.4 8.5 8.4 8.2 8.1		APRIL 8.1 8.2 8.2 8.0	8.2 8.2 8.2 8.2 8.2 8.1	8.4 8.4 8.4 8.3	MAY 8.3 8.3	8.3 8.3 8.3 8.2
1 2 3 4	 	FEBRUARY 	 	8.4 8.5 8.5 8.2	MARCH 8.3 8.4 8.2 8.1	8.4 8.5 8.4 8.2	8.2 8.3 8.2 8.2	8.1 8.2 8.2 8.0 8.1 8.2	8.2 8.2 8.2 8.2	8.4 8.4 8.4 8.3	MAY 8.3 8.3 8.3 8.0	8.3 8.3 8.3
1 2 3 4 5 6 7 8 9	 8.3	FEBRUARY 8.2	 8.2	8.4 8.5 8.5 8.2 8.1 8.1 8.0 7.9	MARCH 8.3 8.4 8.2 8.1 8.0 8.0 7.9 7.8	8.4 8.5 8.4 8.2 8.1 8.1 8.0 7.9	8.2 8.3 8.2 8.2 8.3 8.4 8.5 8.6	APRIL 8.1 8.2 8.2 8.0 8.1 8.2 8.3 8.4 8.5	8.2 8.2 8.2 8.2 8.1 8.3 8.4 8.5 8.6	8.4 8.4 8.3 8.2 8.3 8.2	MAY 8.3 8.3 8.3 8.0 8.1 8.2 8.0 8.1 8.3	8.3 8.3 8.2 8.2 8.3 8.0 8.0 8.2 8.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14	 8.3 8.2 8.2 8.2 8.2 8.3	FEBRUARY 8.2 8.1 8.1 8.1 8.1 8.1 8.1	 8.2 8.1 8.1 8.1 8.2 8.2	8.4 8.5 8.5 8.2 8.1 8.1 8.0 7.9 8.4 8.4 8.4	MARCH 8.3 8.4 8.2 8.1 8.0 8.0 7.9 7.8 7.8 8.3 8.2 8.1 8.2	8.4 8.5 8.4 8.2 8.1 8.1 8.0 7.9 8.3 8.4 8.4 8.2 8.2	8.2 8.3 8.2 8.3 8.4 8.5 8.6 8.6 8.6 8.2 8.0 8.3	APRIL 8.1 8.2 8.2 8.0 8.1 8.2 8.3 8.4 8.5 8.5	8.2 8.2 8.2 8.1 8.3 8.4 8.5 8.5 7.9 8.0	8.4 8.4 8.3 8.2 8.3 8.2 8.3 8.4 8.5	MAY 8.3 8.3 8.3 8.0 8.1 8.2 8.0 8.1 8.2 8.0 8.1 8.2 8.0	8.3 8.3 8.2 8.2 8.2 8.3 8.0 8.2 8.3 8.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	 8.3 8.2 8.2 8.2 8.3 8.4 8.3 8.2 8.3	FEBRUARY 8.2 8.1 8.1 8.1 8.1 8.1 8.2 8.2 8.2 8.2 8.2	 8.2 8.1 8.1 8.1 8.2 8.2 8.3	8.4 8.5 8.2 8.1 8.1 8.1 8.0 7.9 8.4 8.4 8.4 8.3 8.3 8.3	MARCH 8.3 8.4 8.2 8.1 8.0 8.0 7.9 7.8 7.8 8.3 8.2 8.1 8.0 8.2 8.1	8.4 8.5 8.4 8.2 8.1 8.1 8.0 7.9 8.3 8.4 8.2 8.1 8.1 8.2	8.2 8.3 8.2 8.3 8.4 8.5 8.6 8.6 8.6 8.2 8.3 8.1	8.1 8.2 8.2 8.0 8.1 8.2 8.3 8.4 8.5 8.5 8.7 97.9 8.0 7.9 8.0 7.9 8.1 8.1 8.1	8.2 8.2 8.2 8.1 8.3 8.4 8.5 8.6 8.5 7.9 8.1 7.9	8.4 8.4 8.3 8.2 8.3 8.2 8.3 8.4 8.5 8.5 8.2 8.2 8.3 8.2	MAY 8.3 8.3 8.3 8.0 8.1 8.2 8.0 8.1 8.2 8.0 8.1 8.2 8.2 8.2 8.2 8.2 8.2	8.3 8.3 8.2 8.2 8.3 8.0 8.2 8.3 8.4 8.2 8.2 8.2 8.2 8.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	 8.3 8.2 8.2 8.2 8.3 8.4 8.3 8.4 8.3 8.4 8.3	FEBRUARY 8.2 8.1 8.1 8.1 8.1 8.1 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2	 8.2 8.1 8.1 8.1 8.2 8.2 8.2 8.2 8.2 8.2 8.3 8.3 8.3 8.3	8.4 8.5 8.2 8.1 8.1 8.1 8.0 7.9 8.4 8.4 8.2 8.3 8.3 8.3 8.3 8.1	MARCH 8.3 8.4 8.2 8.1 8.0 7.9 7.8 7.8 8.3 8.2 8.1 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	8.4 8.5 8.4 8.2 8.1 8.1 8.0 7.9 8.3 8.4 8.2 8.1 8.1 8.2 8.1 8.3 8.1 8.1 8.0 8.0 8.1	8.2 8.3 8.2 8.3 8.4 8.5 8.6 8.6 8.6 8.2 8.3 8.1 8.2 8.2 8.2 8.2 8.2	APRIL 8.1 8.2 8.2 8.0 8.1 8.2 8.3 8.4 8.5 8.5 8.1 8.1 7.9 7.9 8.1 8.1 8.1 8.1 8.1	8.2 8.2 8.2 8.1 8.3 8.4 8.5 8.6 8.5 7.9 8.1 7.9 8.1 8.1 8.1 8.1 8.2 7.9 8.2	8.4 8.4 8.3 8.2 8.3 8.2 8.3 8.4 8.5 8.2 8.2 8.3 8.2 8.3 8.2 8.3 8.4 8.5 8.2 8.3 8.2 8.3 8.4 8.4 8.5 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6	MAY 8.3 8.3 8.3 8.0 8.1 8.2 8.0 8.1 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.3 8.3 8.3 8.3	8.3 8.3 8.2 8.2 8.3 8.0 8.3 8.4 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2

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06889000 KANSAS RIVER AT TOPEKA, KS--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			JULY			AUGUST			SEPTEMB	ER
1 2 3 4 5	8.3 8.3 8.3 8.2 8.1	8.2 8.1 8.1 8.0 8.0	8.2 8.1 8.2 8.1 8.0	8.4 8.3 8.2 8.3	8.1 8.2 8.2 8.2	8.1 8.2 8.2 8.2 8.2	8.8 8.6 8.5 8.4 8.3	8.3 8.4 8.3 8.2 8.2	8.6 8.5 8.4 8.3 8.3	8.4 8.5 8.5 8.6 8.8	8.1 8.4 8.4 8.5	8.3 8.4 8.4 8.6
6 7 8 9 10	8.0 8.0 8.1 8.0 8.0	7.9 7.8 8.0 8.0 7.9	7.9 7.9 8.0 8.0	8.3 8.3 8.4 8.5	8.2 8.2 8.2 8.3 8.3	8.2 8.2 8.3 8.3	8.5 8.5 8.4 8.5 8.5	8.2 8.2 8.3 8.3	8.3 8.3 8.4 8.4	8.8 8.9 9.0 8.9	8.5 8.8 8.7 8.6 8.5	8.7 8.8 8.8 8.7
11 12 13 14 15	7.9 7.9 8.0 8.0	7.9 7.9 7.9 8.0 8.0	7.9 7.9 8.0 8.0	8.6 8.6 8.7 8.9	8.4 8.5 8.5 8.6 8.7	8.5 8.6 8.5 8.7	8.6 8.8 8.9 8.9	8.3 8.4 8.5 8.5	8.4 8.5 8.6 8.7	8.9 8.7 8.6 8.8 8.8	8.6 8.5 8.5 8.5 8.4	8.7 8.6 8.6 8.6
16 17 18 19 20	8.0 8.1 8.1 8.1 8.0	8.0 8.0 7.9 8.0 7.9	8.0 8.1 8.0 8.0	8.9 8.8 9.0 9.0	8.6 8.2 8.7 8.7	8.8 8.5 8.8 8.9	8.9 9.0 9.1 9.3 9.2	8.7 8.7 8.7 8.9 8.9	8.8 8.9 9.0 9.0	8.6 8.8 8.3 8.2 8.4	8.1 8.3 8.1 8.1	8.4 8.4 8.1 8.2 8.3
21 22 23 24 25	7.9 8.0 8.0 8.0	7.8 7.8 8.0 8.0	7.8 8.0 8.0 8.0	8.8 9.0 9.0 8.9 8.8	8.3 8.7 8.8 8.7 8.6	8.5 8.8 8.9 8.8 8.7	9.2 9.1 9.2 9.0	8.4 8.4 8.8 	8.9 8.7 8.9 8.9	8.3 8.3 8.3 8.1	8.3 8.3 7.9 8.0 8.1	8.3 8.3 8.0 8.0
26 27 28 29 30 31	8.1 8.1 8.1 8.1	8.0 8.1 8.1 8.1	8.0 8.1 8.1 8.1 8.1	8.8 8.7 8.7 8.5 8.7	8.6 8.5 8.4 8.0 8.0	8.7 8.7 8.6 8.3 8.2 8.6	8.1 8.1 8.2 8.2	8.0 8.0 8.1 8.1	e8.1 8.0 8.1 8.2	8.2 8.1 8.2 8.2 8.2	8.1 8.1 8.1 8.1	8.1 8.1 8.2 8.1
MAX MIN	8.3 7.9	8.2 7.8	8.2 7.8	9.0 8.2	8.8 8.0	8.9 8.1	9.3 8.1	8.9 8.0	9.0 8.0	9.0 8.1	8.8 7.9	8.8

e Estimated

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		N	OVEMBER		DE	ECEMBER			JANUARY	7
1 2 3 4 5	20.5 21.9 23.3 22.6 17.4	17.2 18.3 19.5 17.4 14.4	19.0 20.2 21.4 19.3 16.0	19.6 17.1 15.8 13.9 13.9	17.1 14.7 12.9 11.4 12.9	18.7 16.0 13.9 12.8 13.3	2.8 3.0 2.3 3.6 3.5	1.8 1.7 .5 1.4 1.5	2.0 2.2 1.6 2.5 2.4	 		
6 7 8 9 10	15.0 11.8 12.0 12.6 13.0	11.3 9.1 8.6 9.1 9.8	12.7 10.6 10.5 11.0	14.3 9.9 7.4 6.3 5.5	9.9 7.3 5.2 4.2 3.8	12.8 8.1 6.0 5.3 4.8	2.5 4.6 4.6 3.8 3.5	.8 1.5 3.6 2.8 .6	1.7 3.0 4.1 3.3 2.6		 	
11 12 13 14 15	14.6 16.9 17.4 17.8 18.7	10.7 13.0 15.8 16.8 17.1	12.7 14.9 16.7 17.3 17.8	4.6 5.8 4.0 3.7 5.0	3.8 4.0 1.5 1.3 2.4	4.1 4.6 2.6 2.6 3.8	. 4 		e.1 	 		
16 17 18 19 20	19.1 19.0 19.4 20.0 19.7	16.9 16.0 16.2 17.4 17.2	18.0 17.7 18.1 18.9 18.6	4.9 2.5 3.3 4.1 3.0	2.5 .4 .9 2.0 .8	3.5 1.7 2.2 3.0 1.7	 	 	 	 1.0 .6	.0 .0	 .3 .2 .1
21 22 23 24 25	19.0 18.2 20.0 20.1 19.8	17.5 17.3 18.0 18.9 18.3	18.3 17.8 18.9 19.6 19.0	2.2 3.2 4.4 5.1 5.0	.1 1.3 2.4 3.8 3.7	1.2 2.4 3.5 4.5 4.4	 		 	1.2 1.4 1.5 1.4	.0 .0 .1 .1	.3 .4 .5 .6
26 27 28 29 30 31	18.6 18.7 18.5 18.2 19.1 20.1	17.4 17.7 17.5 16.5 16.8 18.2	18.0 18.3 18.1 17.4 18.1 19.1	5.4 4.8 6.5 5.9 4.6	3.5 3.0 4.1 3.9 2.7	4.5 4.1 5.2 4.9 3.3	 	 		 		
MONTH	23.3	8.6	17.0	19.6	.1	6.0	4.6	.5	2.3	1.5	.0	.3

06889000 KANSAS RIVER AT TOPEKA, KS--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		TEMPE	RAIURE,	WATER (DE	G. C), N	IATER YEAR	OCTOBER	2000 10	SEPTEMBER	2001		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2				2.2 2.9	1.5 1.9	1.8 2.4	9.2 8.9	8.1 7.5	8.5 8.1	22.9 22.6	18.2 20.3	20.2 21.1
3				3.4	2.0	2.7	10.2	8.9	9.7	21.5	20.3	20.8
4 5				4.5 5.1	2.4	3.4 4.1	10.9 13.9		10.1 11.9	21.5 21.8	19.6 19.5	20.5 20.6
6				4.5	3.1	3.9	16.7	13.9	15.1	21.4	19.6	20.6
7 8				4.2 5.4	3.0 2.4	3.5 3.8	18.1 19.7	14.9 15.6	16.5 17.5	21.5 22.3	19.2 19.2	20.5 20.7
9	3.6	.0	.5	6.4	3.7	5.1	20.8	18.5	19.5	23.9	19.7	21.6
10	1.2	.0	.3	7.9	5.2	6.6	20.2	17.8	18.5	25.1	21.5	23.2
11 12	1.5 1.1	.0	.5 .5	7.5 7.1	5.7 5.0	6.3 6.1	18.7 16.3	16.3 13.8	18.0 14.9	24.4 23.0	21.7 20.9	22.9 22.1
13 14	1.5 .7	.4	.8 .4	7.8 9.9	4.4 7.2	6.1 8.6	16.1 16.0	13.8 14.1	15.1 15.2	23.6 24.7	20.6 22.0	22.1 23.3
15	. 4	.0	.1	9.9	6.6	8.5	15.5	13.5	14.4	25.1	22.4	23.8
16	.6	.0	.1	7.0	5.4	6.3	14.7	12.2	13.4	26.4	23.3	24.7
17 18	1.1 1.8	.0	.3 .6	8.1 7.9	5.5 6.2	6.8 7.3	13.0 13.9	10.5 11.2	11.7 12.6	26.4 25.2	24.7 23.6	25.5 24.1
19 20	3.8 3.5	.0 2.0	1.6 2.8	9.4 10.0	7.1 7.3	8.1 8.6	15.2 18.1	12.6 15.0	13.8 16.2	24.7 24.3	22.1 22.5	23.3 23.2
21	2.6	.0	.6	8.4	5.8	6.4	19.8	17.4	18.6	22.8	19.4	20.4
22 23	2.8	.0 1.6	1.2	6.6 6.5	5.7 5.7	6.1 6.1	19.6 19.0	18.8 14.7	19.2 16.5	19.4 19.2	17.8 17.4	18.5 18.4
24	4.0	.3	2.8	6.1	5.3	5.8	17.7	14.3	16.0	18.6	16.5	17.3
25	.3	.0	.0	6.2	5.0	5.6	20.3	15.9	17.7	18.7	16.6	17.5
26 27	2.4	.0 .5	.5 1.3	6.3 6.4	4.7 5.2	5.6 5.9	21.6 22.5	17.7 19.5	19.4 21.0	20.2 22.0	17.8 18.9	18.9 20.4
28 29	1.5	.3	.8	6.3 7.5	5.7 5.5	5.9 6.4	22.5 22.1		21.2 20.9	23.3 23.0	20.2 21.1	21.7 21.6
30				8.4	6.6	7.5	21.5	19.2	19.8	21.3	19.8	20.2
31				9.5	7.4	8.5				19.9	17.9	18.7
MONTH	4.0	.0	.9	10.0	1.5	5.8	22.5	7.5	15.7	26.4	16.5	21.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBE	
1	21.0	JUNE 16.8	18.6	28.3	JULY 26.3	27.4	32.5	AUGUST	30.8	26.4	SEPTEMBE 24.1	25.3
1 2 3		JUNE			JULY			AUGUST			SEPTEMBE	25.3 25.6 26.7
1 2 3 4	21.0 22.7 22.3 18.4	JUNE 16.8 19.5 18.4 16.9	18.6 21.0 20.3 17.5	28.3 27.8 28.8 29.8	JULY 26.3 26.0 26.1 26.9	27.4 27.0 27.4 28.3	32.5 33.0 32.6 33.1	AUGUST 29.1 29.5 30.3 29.9	30.8 31.2 31.6 31.4	26.4 27.2 28.8 29.1	24.1 24.1 25.1 26.3	25.3 25.6 26.7 27.7
1 2 3 4 5	21.0 22.7 22.3 18.4 18.1	JUNE 16.8 19.5 18.4 16.9 17.4	18.6 21.0 20.3 17.5 17.8	28.3 27.8 28.8 29.8 29.5	JULY 26.3 26.0 26.1 26.9 27.5	27.4 27.0 27.4 28.3 28.5	32.5 33.0 32.6 33.1 33.2	AUGUST 29.1 29.5 30.3 29.9 30.0	30.8 31.2 31.6 31.4 31.6	26.4 27.2 28.8 29.1 28.3	24.1 24.1 25.1 26.3 25.8	25.3 25.6 26.7 27.7 26.9
1 2 3 4 5	21.0 22.7 22.3 18.4 18.1 20.8 22.5	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1	18.6 21.0 20.3 17.5 17.8	28.3 27.8 28.8 29.8 29.5 29.5	JULY 26.3 26.0 26.1 26.9 27.6	27.4 27.0 27.4 28.3 28.5	32.5 33.0 32.6 33.1 33.2 32.8 31.9	AUGUST 29.1 29.5 30.3 29.9 30.0 29.7 28.9	30.8 31.2 31.6 31.4 31.6	26.4 27.2 28.8 29.1 28.3 27.0 26.2	24.1 24.1 25.1 26.3 25.8 25.0 24.2	25.3 25.6 26.7 27.7 26.9 26.0 24.9
1 2 3 4 5 6 7 8 9	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8 22.8	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6 21.2	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.1 22.2	28.3 27.8 28.8 29.5 29.5 30.7 30.9 33.0	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.1 29.2	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5 30.8	32.5 33.0 32.6 33.1 33.2 32.8 31.9 31.9 32.2	29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.9 28.6	30.8 31.2 31.6 31.4 31.6 31.3 30.5 30.4	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4 23.7	SEPTEMBE 24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7 21.2	25.3 25.6 26.7 27.7 26.9 26.0 24.9 23.5 22.6
1 2 3 4 5	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.1	28.3 27.8 28.8 29.8 29.5 29.5 30.7 30.9	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.1 29.2 29.6	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5	32.5 33.0 32.6 33.1 33.2 32.8 31.9 31.9 32.2 31.4	29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.9	30.8 31.2 31.6 31.4 31.6 31.3 30.5	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4	24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7	25.3 25.6 26.7 27.7 26.9 26.0 24.9 23.5
1 2 3 4 5 6 7 8 9 10	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8 22.8 23.4 24.1	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6 21.2 21.4	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.1 22.2 22.4	28.3 27.8 28.8 29.8 29.5 29.5 30.7 30.9 33.0 32.4	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.1 29.2 29.6 28.2	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5 30.8 31.1	32.5 33.0 32.6 33.1 33.2 32.8 31.9 31.9 32.2 31.4	AUGUST 29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.9 28.6 26.3	30.8 31.2 31.6 31.4 31.6 31.3 30.5 30.4 30.3 28.0	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4 23.7 24.1	SEPTEMBE 24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7 21.2 20.3 21.0	25.3 25.6 26.7 27.7 26.9 26.0 24.9 23.5 22.6 22.2
1 2 3 4 5 6 7 8 9 10	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8 22.8 23.4 24.1 24.5 24.2	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6 21.2 21.4 22.2 22.7 22.9	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.1 22.2 22.4 23.1 23.6 23.5	28.3 27.8 28.8 29.8 29.5 29.5 30.7 30.9 33.0 32.4 31.4 29.7 27.5	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.1 29.2 29.6 28.2 26.0 24.2	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5 30.8 31.1 29.8 27.5 25.7	32.5 33.0 32.6 33.1 33.2 32.8 31.9 31.9 31.9 32.2 31.4 28.2 29.6 30.0	29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.9 28.6 26.3	30.8 31.2 31.6 31.4 31.6 31.3 30.5 30.4 30.3 28.0 26.4 27.7 28.8	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4 23.7 24.1 24.1 24.8 25.3	24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7 21.2 20.3 21.0 21.0 22.2	25.3 25.6 26.7 27.7 26.9 26.0 24.9 23.5 22.6 22.2 22.6 22.8 23.7
1 2 3 4 5 6 7 8 9 10	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8 23.4 24.1 24.5	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6 21.2 21.4 22.2 22.7	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.1 22.2 22.4	28.3 27.8 28.8 29.5 29.5 30.7 30.9 33.0 32.4	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.1 29.6 28.2 29.6	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5 30.8 31.1	32.5 33.0 32.6 33.1 33.2 32.8 31.9 31.9 32.2 31.4 28.2	AUGUST 29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.9 28.6 26.3	30.8 31.2 31.6 31.4 31.6 31.3 30.5 30.4 30.3 28.0	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4 23.7 24.1	24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7 21.2 20.3	25.3 25.6 26.7 27.7 26.9 28.0 24.9 23.5 22.6 22.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8 22.8 23.4 24.1 24.5 24.2 23.7	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6 21.2 21.4 22.2 22.7 22.9 22.4	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.1 22.2 22.4 23.1 23.5 23.5 23.1	28.3 27.8 28.8 29.8 29.5 29.5 30.7 30.9 33.0 32.4 31.4 29.7 27.5	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.1 29.6 28.2 29.6 28.2 26.0 24.2 25.2	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5 30.8 31.1 29.8 27.5 25.7 26.3	32.5 33.0 32.6 33.1 33.2 32.8 31.9 31.9 32.2 31.4 28.2 29.6 30.0 28.9	AUGUST 29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.6 26.3 25.0 26.0 27.7 26.9	30.8 31.2 31.6 31.4 31.6 31.3 30.5 30.3 28.0 26.4 27.7 28.8 27.9	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4 23.7 24.1 24.1 24.8 25.3 24.6 22.0	24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7 21.2 20.3 21.0 21.0 22.2 21.5 17.8	25.3 25.6 26.7 27.7 26.9 26.0 24.9 23.5 22.6 22.2 22.6 22.8 23.7 22.6 19.5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8 23.4 24.1 24.5 24.2 23.7 23.6	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6 21.2 21.4 22.2 21.7 22.9 21.3	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.2 22.4 23.6 23.5 23.1 22.3 23.7 24.1	28.3 27.8 28.8 29.8 29.5 29.5 30.7 30.9 33.0 32.4 31.4 29.7 27.5 27.5 27.5 26.9	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.1 29.6 28.2 29.6 28.2 24.9 24.4 26.6	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5 30.8 31.1 29.8 27.5 25.7 26.3 25.9	32.5 33.0 32.6 33.1 33.2 32.8 31.9 31.9 32.2 31.4 28.2 29.6 30.0 28.9 27.0	AUGUST 29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.6 26.3 25.0 26.0 27.7 26.9 24.6	30.8 31.2 31.6 31.4 31.6 31.3 30.5 30.4 427.7 28.8 27.9 25.8 25.8	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4 23.7 24.1 24.1 24.8 25.3 24.6 22.0	24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7 21.2 20.3 21.0 21.0 22.2 21.5 17.8	25.3 25.6 26.7 27.7 26.9 26.0 24.9 23.5 22.6 22.2 22.6 22.3 7 22.6 19.5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8 22.8 23.4 24.1 24.5 24.2 23.7 23.6 24.8 25.0 24.6 24.3	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6 21.2 21.4 22.2 21.4 22.2 22.7 22.9 22.4 21.3 22.8 23.2 23.1 22.3	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.1 22.2 22.4 23.1 23.6 23.5 23.1 22.3 23.7 24.1 23.9 23.7	28.3 27.8 28.8 29.8 29.5 29.5 30.7 33.0 32.4 31.4 29.7 27.5 27.5 26.9 28.1 31.5 32.3 31.6	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.1 29.6 28.2 29.6 24.2 25.2 24.9 24.4 26.6 28.7 28.4	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5 30.8 31.1 29.8 27.5 26.3 25.9 26.1 28.6 30.5 30.1	32.5 33.0 32.6 33.1 33.2 32.8 31.9 31.9 32.2 31.4 28.2 29.6 30.0 28.9 27.0	29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.6 26.3 25.0 26.0 27.7 26.9 24.6	30.8 31.2 31.6 31.4 31.6 31.3 30.5 30.3 28.0 26.4 27.7 28.8 27.9 25.8 25.8 25.3 25.9	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4 23.7 24.1 24.8 25.3 24.6 22.0 21.5 21.5 20.4 21.1	24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7 21.2 20.3 21.0 21.0 22.2 21.5 17.8 17.6 19.9 19.0 18.5	25.3 25.6 26.7 27.7 26.9 26.0 24.9 23.9 22.6 22.2 22.6 22.8 23.7 22.6 19.5 19.5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8 23.4 24.1 24.5 24.2 23.7 23.6 24.8 25.0 24.6 24.3 22.3	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6 21.2 21.4 22.2 21.4 22.2 23.1 22.3 21.3	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.1 22.2 22.4 23.6 23.5 23.1 22.3 23.7 24.1 23.9 23.2 21.7	28.3 27.8 28.8 29.5 29.5 30.7 30.9 33.0 32.4 31.4 29.7 27.5 27.5 26.9 28.1 31.5 32.3 31.6 32.4	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.1 29.6 28.2 29.6 24.2 25.2 24.4 26.6 28.7 28.4 29.2	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5 30.8 31.1 29.8 27.5 25.7 26.3 25.9 26.1 28.6 30.5 30.1	32.5 33.0 32.6 33.1 33.2 32.8 31.9 31.9 32.2 31.4 28.2 29.6 30.0 28.9 27.0 27.5 26.8 27.6 27.6	29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.9 28.6 26.3 25.0 26.0 27.7 26.9 24.6 23.9 24.5 24.1 24.1	30.8 31.2 31.6 31.4 31.6 31.3 30.5 30.4 30.3 28.0 26.4 27.7 28.8 27.9 25.8 25.8 25.8 25.9 26.1	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4 23.7 24.1 24.1 24.8 25.3 24.6 22.0 21.5 21.5 20.4 21.1 22.8	24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7 21.2 20.3 21.0 22.2 21.5 17.8 17.6 19.9 19.0 18.5 20.5	25.3 25.6 26.7 27.7 26.9 26.0 24.9 23.5 22.6 22.2 22.6 22.2 19.5 19.1 20.5 19.5 19.6 21.5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8 23.4 24.1 24.5 24.2 23.7 23.6 24.8 25.0 24.6 24.6 22.3	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6 21.2 21.4 22.2 21.4 22.2 23.1 22.8 23.1 22.3 21.3	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.2 22.4 23.1 23.6 23.5 23.1 22.3 23.7 24.1 23.9 23.1 22.3	28.3 27.8 28.8 29.8 29.5 30.7 33.0 32.4 31.4 29.7 27.5 26.9 28.1 31.5 32.3 31.4 32.5 32.8	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.1 29.6 28.2 24.9 24.4 26.6 28.7 28.7 28.8 29.6	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5 30.8 31.1 29.8 27.5 25.7 26.3 25.9 26.1 28.6 30.5 30.7	32.5 33.0 32.6 33.1 33.2 32.8 31.9 32.2 31.4 28.2 29.6 30.0 28.9 27.0 27.5 26.8 27.6 27.7	AUGUST 29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.6 26.3 25.0 26.0 27.7 26.9 24.6 23.9 24.5 24.1 24.1 24.5 25.1 25.4	30.8 31.2 31.6 31.4 31.6 31.3 30.5 30.3 28.0 26.4 27.7 28.8 27.9 25.8 25.8 25.8 25.8 25.9 26.1	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4 23.7 24.1 24.8 25.3 24.6 22.0 21.5 21.5 20.4 21.1 22.8	24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7 21.2 20.3 21.0 21.0 21.0 22.2 21.5 17.8 17.6 19.9 19.0 18.5 20.5	25.3 25.6 26.7 27.7 26.9 26.0 24.9 23.5 22.6 22.2 22.6 22.2 22.6 19.5 19.5 19.5 19.5 19.5 19.5 22.6 21.5
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8 23.4 24.1 24.5 24.2 23.7 23.6 24.6 24.8 25.0 24.6 24.3 22.0 24.5 22.0 24.5 25.0	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6 21.2 21.4 22.2 21.4 22.2 23.1 22.3 21.3 20.2 21.5 23.0	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.2 22.4 23.6 23.5 23.1 22.3 23.7 24.1 23.9 23.2 21.7 21.0 22.7 23.9	28.3 27.8 28.8 29.5 29.5 30.7 30.9 33.0 32.4 31.4 29.7 27.5 27.5 27.5 27.5 27.5 27.5 27.5 27	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.1 29.6 28.2 25.2 24.9 24.4 26.6 28.7 28.4 29.2 29.0 29.6	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5 30.8 31.1 29.8 27.5 25.7 26.3 25.9 26.1 28.6 30.5 30.1 30.7	32.5 33.0 32.6 33.1 33.2 32.8 31.9 31.9 32.2 31.4 28.2 29.6 30.0 28.9 27.0 27.5 26.8 27.6 27.6 27.6 27.7	29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.6 26.3 25.0 26.0 27.7 26.9 24.6 23.9 24.5 24.1 24.1 24.5	30.8 31.2 31.6 31.4 31.6 31.3 30.5 30.4 30.3 28.0 26.4 27.7 28.8 27.9 25.8 25.8 25.9 26.1 26.8 26.9 26.2	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4 23.7 24.1 24.1 24.8 25.3 24.6 22.0 21.5 21.5 20.4 21.1 22.8	24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7 21.2 20.3 21.0 22.2 21.5 17.8 17.6 19.9 19.0 18.5 20.5	25.3 25.6 26.7 27.7 26.9 26.0 24.9 23.5 22.6 22.2 22.6 22.8 23.7 22.6 19.5 19.5 19.5 19.6 21.5 22.6 21.5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8 22.8 23.4 24.1 24.5 24.2 23.7 23.6 24.8 25.0 24.6 24.3 22.3 22.3 22.3 22.3 22.3 22.3 23.4 25.5 26.6 26.6 26.6 26.6 26.6 26.6 26.6	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6 21.2 21.4 22.2 21.3 22.8 23.2 23.1 22.3 21.3 20.2 21.5 23.0 23.9 24.4 24.3	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.2 22.4 23.1 23.6 23.5 23.1 22.3 23.7 24.1 23.9 23.2 21.7 21.0 22.7 23.9 24.9 25.2	28.3 27.8 28.8 29.8 29.5 29.5 30.7 33.0 32.4 31.4 29.7 27.5 27.5 27.5 27.5 27.5 27.5 27.5 27	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.2 29.6 28.2 25.2 24.9 24.4 26.6 28.7 28.4 29.2 29.6 29.6 28.2 24.9	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5 30.8 31.1 29.8 27.5 26.3 25.9 26.1 28.6 30.5 30.1 30.7 30.8 31.2 29.0 29.0 29.0 29.0 29.0 29.0 29.0 29	32.5 33.0 32.6 33.1 33.2 32.8 31.9 31.9 32.2 31.4 28.2 29.6 30.0 28.9 27.0 27.5 26.8 27.6 27.7 28.5 28.5 28.3	29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.6 26.3 25.0 26.0 27.7 26.9 24.6 23.9 24.5 24.1 24.1 24.5	30.8 31.2 31.6 31.4 31.6 31.3 30.5 30.4 30.3 28.0 26.4 27.7 28.8 27.9 25.8 25.8 25.3 25.8 25.9 26.1 26.8 26.9 26.4	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4 23.7 24.1 24.8 25.3 24.6 22.0 21.5 21.5 21.5 20.4 21.1 22.8 23.5 23.1 20.9 21.1	SEPTEMBE 24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7 21.2 20.3 21.0 21.0 22.2 21.5 17.8 17.6 19.9 19.0 18.5 20.5 21.6 20.9 18.4 17.5 17.3	25.3 25.6 26.7 27.7 26.9 26.0 24.9 23.5 22.6 22.2 22.6 22.8 23.7 22.6 19.5 19.1 20.5 19.5 19.6 21.5 22.6 21.8 19.6 21.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8 23.4 24.1 24.5 24.2 23.7 23.6 24.8 25.0 24.6 24.3 22.3 22.3 22.0 24.5 25.1 26.0 26.0 26.0 26.0 26.0 26.0 26.0 26.0	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6 21.2 21.4 22.2 21.7 22.9 22.4 21.3 22.8 23.1 22.3 21.3 20.2 23.1 22.3 21.5 23.0 23.9 24.4 24.3 24.8	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.2 22.4 23.6 23.5 23.1 22.3 23.7 24.1 23.9 23.2 21.7 21.0 22.7 23.9 24.9 25.2 25.8	28.3 27.8 28.8 29.8 29.5 30.7 30.9 33.0 32.4 31.4 29.7 27.5 27.5 26.9 28.1 31.5 32.3 31.6 32.4 32.5 32.8 31.8 30.6 29.9	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.1 29.6 28.2 24.9 24.4 26.6 28.7 28.4 29.2 29.0 24.2 25.2 21.9 29.0 24.3 28.1 28.0 27.1 28.0	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5 30.8 31.1 29.8 27.5 25.7 26.3 25.9 26.1 28.6 30.5 30.1 30.7 30.8 31.2 30.0 29.2 29.0 29.0 29.0 29.0 30.8	32.5 33.0 32.6 33.1 33.2 32.8 31.9 31.9 32.2 31.4 28.2 29.6 30.0 27.5 26.8 27.6 27.6 27.7 28.5 28.3 27.4	29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.6 26.3 25.0 26.0 27.7 26.9 24.6 23.9 24.5 24.1 24.5 24.1 24.5	30.8 31.2 31.6 31.4 31.6 31.3 30.5 30.4 30.3 28.0 26.4 27.7 28.8 27.9 25.8 25.8 25.8 25.8 25.9 26.1 26.8 26.9 26.2 e26.4	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4 24.1 24.1 24.8 25.3 24.6 22.0 21.5 20.4 21.1 22.8 23.5 23.1 20.9 18.9 19.3	24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7 21.2 20.3 21.0 21.0 21.0 22.2 21.5 17.8 17.6 19.9 19.0 18.5 20.5 21.6 20.9 18.4 17.5 17.3	25.3 25.6 26.7 27.7 26.9 26.0 24.9 23.5 22.6 22.2 22.6 22.2 22.6 22.3 7 22.6 22.8 23.7 22.6 22.2 22.8 23.7 22.6 22.8 23.7 22.6 22.8 23.7 22.6 22.8 23.7 22.6 22.8 23.7 22.6 22.8 23.7 22.6 22.8 23.7 22.6 22.8 23.7 22.6 22.8 23.7 22.6 22.8 23.7 22.6 22.8 23.7 24.9 25.0 26.0 26.0 26.0 26.0 26.0 26.0 26.0 26
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8 23.4 24.1 24.5 24.2 23.7 23.6 24.8 25.0 24.6 24.3 22.3 22.3 22.3 22.3 24.5 25.0 24.6 25.0 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6 21.2 21.4 22.2 21.3 22.8 23.2 23.1 21.3 20.2 21.5 23.0 23.9 24.4 24.3 24.8 25.4	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.2 22.4 23.1 23.6 23.5 23.1 22.3 23.7 24.1 23.9 23.7 24.1 23.9 23.7 24.1 23.9 23.7 24.9 25.2 25.8 26.7	28.3 27.8 28.8 29.8 29.5 30.7 30.9 33.0 32.4 31.4 29.7 27.5 26.9 28.1 31.5 32.3 31.6 32.4 32.5 32.8 31.8 32.9 32.8 31.8 32.4 32.8 31.8 32.4	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.1 29.6 28.2 24.9 24.4 26.6 28.7 28.4 29.2 29.6 29.6 27.1 28.7 28.8 29.6	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5 30.8 31.1 29.8 27.5 25.7 26.3 25.9 26.1 28.6 30.5 30.7 30.8 31.2 30.0 29.2 29.0	32.5 33.0 32.6 33.1 33.2 32.8 31.9 32.2 31.4 28.2 29.6 30.0 27.5 26.8 27.6 27.7 28.5 28.3 27.4 28.2	29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.6 26.3 25.0 26.0 27.7 26.9 24.6 23.9 24.5 24.1 24.5 24.1 24.5 25.4 24.6	30.8 31.2 31.6 31.4 31.6 31.3 30.5 30.3 28.0 26.4 27.7 28.8 27.9 25.8 25.8 25.8 25.8 25.9 26.1 26.8 26.9 26.2	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4 23.7 24.1 24.8 25.3 24.6 22.0 21.5 21.5 20.4 21.1 22.8 23.5 23.1 20.9 19.3	24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7 21.2 20.3 21.0 21.0 21.5 17.8 17.6 19.9 19.0 18.5 20.5 21.6 20.9 18.4 17.5 17.3 17.5 17.9 18.7 18.2 18.2	25.3 25.6 26.7 27.7 26.9 26.0 24.9 23.5 22.6 22.2 22.6 22.2 22.6 19.5 19.5 19.5 19.5 19.6 21.5 22.6 21.8 19.4 18.2 18.3 18.6 19.1 19.7 19.7 19.3 19.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8 22.8 23.4 24.1 24.5 23.7 23.6 24.8 25.0 24.6 24.3 22.3 22.3 22.3 22.3 22.3 22.3 22.3	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6 21.2 21.4 22.2 21.3 22.8 23.2 23.1 22.3 21.3 20.2 21.5 23.0 23.9 24.4 24.3 24.8 25.4	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.2 22.4 23.1 23.6 23.5 23.1 22.3 23.7 24.1 23.9 23.2 21.7 21.0 22.7 23.9 24.9 25.2 25.2 25.2 25.2 25.2 25.2	28.3 27.8 28.8 29.8 29.5 29.5 30.7 33.0 32.4 31.4 29.7,5 27.5 27.5 27.5 27.5 27.5 27.5 27.5 27.	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.2 29.6 28.2 25.2 24.9 24.4 26.6 28.7 28.4 29.2 29.6 29.6 28.2 25.2 24.9	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5 30.8 31.1 29.8 27.5 25.7 26.3 25.9 26.1 28.6 30.5 30.1 30.7 30.8 31.2 29.0 29.2 29.0 29.2	32.5 33.0 32.6 33.1 33.2 32.8 31.9 31.9 32.2 31.4 28.2 29.6 30.0 28.9 27.0 27.5 26.8 27.6 27.7 28.5 28.5 28.3 27.4	AUGUST 29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.6 26.3 25.0 26.0 27.7 26.9 24.6 23.9 24.5 24.1 24.1 24.5 25.1 25.4 24.6 25.3 25.5 26.1	30.8 31.2 31.6 31.4 31.6 31.3 30.5 30.4 30.3 28.0 26.4 27.7 28.8 27.9 25.8 25.8 25.8 25.8 25.9 26.1 26.8 26.9 26.4 26.8 27.4	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4 23.7 24.1 24.8 25.3 24.6 22.0 21.5 21.5 21.5 20.4 21.1 22.8 23.5 23.1 20.9 19.3	SEPTEMBE 24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7 21.2 20.3 21.0 21.0 22.2 21.5 17.8 17.6 19.9 19.0 18.5 20.5 21.6 20.9 18.4 17.5 17.3 17.5 17.9 18.7	25.3 25.6 26.7 27.7 26.9 26.0 24.9 23.5 22.6 22.2 22.6 22.8 23.7 23.7 22.6 19.5 19.1 20.5 19.5 21.5 22.6 21.8 19.6 21.5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	21.0 22.7 22.3 18.4 18.1 20.8 22.5 22.8 23.4 24.1 24.5 24.2 23.7 23.6 24.8 25.0 24.6 24.3 22.3 22.3 22.3 22.3 24.5 25.0 24.6 25.0 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1	JUNE 16.8 19.5 18.4 16.9 17.4 18.0 20.1 21.6 21.2 21.4 22.2 21.3 22.8 23.2 23.1 21.3 20.2 21.5 23.0 23.9 24.4 24.3 24.8 25.4	18.6 21.0 20.3 17.5 17.8 19.3 21.1 22.2 22.4 23.1 23.6 23.5 23.1 22.3 23.7 24.1 23.9 23.7 24.1 23.9 23.7 24.1 23.9 23.7 24.9 25.2 25.8 26.7	28.3 27.8 28.8 29.8 29.5 30.7 30.9 33.0 32.4 31.4 29.7 27.5 26.9 28.1 31.5 32.3 31.6 32.4 32.5 32.8 31.8 32.9 32.8 31.8 32.4 32.8 31.8 32.4	JULY 26.3 26.0 26.1 26.9 27.5 26.9 27.6 28.1 29.6 28.2 24.9 24.4 26.6 28.7 28.4 29.2 29.6 29.6 27.1 28.7 28.8 29.6	27.4 27.0 27.4 28.3 28.5 28.2 29.0 29.5 30.8 31.1 29.8 27.5 25.7 26.3 25.9 26.1 28.6 30.5 30.7 30.8 31.2 30.0 29.2 29.0	32.5 33.0 32.6 33.1 33.2 32.8 31.9 32.2 31.4 28.2 29.6 30.0 27.5 26.8 27.6 27.7 28.5 28.3 27.4 28.2	29.1 29.5 30.3 29.9 30.0 29.7 28.9 28.6 26.3 25.0 26.0 27.7 26.9 24.6 23.9 24.5 24.1 24.5 24.1 24.5 25.4 24.6	30.8 31.2 31.6 31.4 31.6 31.3 30.5 30.3 28.0 26.4 27.7 28.8 27.9 25.8 25.8 25.8 25.8 25.9 26.1 26.8 26.9 26.2	26.4 27.2 28.8 29.1 28.3 27.0 26.2 24.4 23.7 24.1 24.8 25.3 24.6 22.0 21.5 21.5 20.4 21.1 22.8 23.5 23.1 20.9 19.3	24.1 24.1 25.1 26.3 25.8 25.0 24.2 22.7 21.2 20.3 21.0 21.0 21.5 17.8 17.6 19.9 19.0 18.5 20.5 21.6 20.9 18.4 17.5 17.3 17.5 17.9 18.7 18.2 18.2	25.3 25.6 26.7 27.7 26.9 26.0 24.9 23.5 22.6 22.2 22.6 22.2 22.6 19.5 19.5 19.5 19.5 19.6 21.5 22.6 21.8 19.4 18.2 18.3 18.6 19.1 19.7 19.7 19.3 19.2

e Estimated

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

06889000 KANSAS RIVER AT TOPEKA, KS--Continued

		OAI	GEN DISC	OLVED (FIG)	L), WAIL	IL ILAN	OCTOBER 200	JU IU SEE	LEMDEK	2001		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			OVEMBER		Ι	DECEMBER			JANUARY	7
1	12.8	8.7	10.4	9.6 12.6	7.9	8.7	14.0	13.3	13.7			
2	13.3	8.2	10.3	12.6	8.7	10.3	14.5	13.9	14.1			
3 4	12.3 11.0	7.9 7.8	9.6 9.2	12.3 12.4	9.2 9.9	10.5 10.9	14.9 14.5	13.8 13.4	$14.4 \\ 14.0$			
5	10.6	8.6	9.5	11.2	9.4	10.1	14.6	13.3	13.9			
6	13.1	9.6	11.2	10.6	8.9	9.8	14.8	13.9	14.4			
7	12.5	10.8	11.6	12.7	10.5	11.7	14.2	12.9	13.8			
8 9	12.6 12.3	10.9 10.7	$\frac{11.7}{11.4}$	12.7 12.8	11.5 12.0	$12.1 \\ 12.4$	14.0 14.0	12.8 13.2	13.3 13.6			
10	12.2	10.5	11.2	12.9	12.0	12.5	14.5	13.2	13.8			
11	12.6	10.3	11.1	13.1	12.4	12.8						
12	13.8	10.0	11.3	13.0	12.5	12.8						
13 14	12.2 12.3	9.2 9.1	10.6 10.4	$14.1 \\ 14.1$	12.6 13.2	13.5 13.7						
15	13.8	9.2	11.1	13.7	12.6	13.2						
16	13.2	9.4	10.9	13.6	12.6	13.2						
17	14.0	9.4	11.2	14.5	13.5	14.2						
18 19	12.7 13.3	9.5 9.2	10.8 10.7	$14.4 \\ 14.0$	13.6 13.5	14.0 13.7				16.2 16.1	15.5 15.6	15.7 15.9
20	13.2	9.1	10.8	14.6	13.5	14.1				16.0	14.5	15.2
21	12.5	9.2	10.4	14.3	13.5	14.0				14.7	14.5	14.6
22	12.4	9.3	10.6	13.9	13.1	13.5				15.2	14.3	15.0
23 24	13.1 12.5	9.4 9.1	10.8 10.3	13.4 13.1	12.6 12.5	13.1 12.7				15.3 15.5	15.1 15.2	15.2 15.3
25	11.7	8.7	10.0	13.1	12.4	12.7						
26	12.9	8.9	10.5	13.1	12.4	12.7						
27	12.8	8.8	10.3	13.1	12.4	12.7						
28	13.3	9.0	10.6	13.1	12.1	12.6						
29 30	14.3 12.5	8.5 7.6	11.0 10.0	13.3 13.8	12.1 12.7	12.7 13.3						
31	11.9	8.3	9.7									
MONTH	14.3	7.6	10.6	14.6	7.9	12.5	14.9	12.8	13.9	16.2	14.3	15.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY		MIN FEBRUARY		MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2				13.9 13.8		13.8 13.7	MAX 11.0 11.2		MEAN 10.9 11.1	MAX 9.1 8.5		8.8 8.3
1 2 3		FEBRUARY	 	13.9 13.8 13.9	MARCH 13.7 13.3 13.5	13.8 13.7 13.7	11.0 11.2 11.0	10.9 10.9 10.9	10.9 11.1 10.6	9.1 8.5 8.6	MAY 8.1 8.1 8.1	8.8 8.3 8.3
1 2		FEBRUARY		13.9 13.8	MARCH 13.7 13.3	13.8 13.7	11.0 11.2	APRIL 10.9 10.9	10.9 11.1	9.1 8.5	MAY 8.1 8.1	8.8 8.3
1 2 3 4 5	 	FEBRUARY	 	13.9 13.8 13.9 13.5 13.1	MARCH 13.7 13.3 13.5 13.0 12.8	13.8 13.7 13.7 13.3 13.0	11.0 11.2 11.0 10.5	APRIL 10.9 10.9 10.3 9.5	10.9 11.1 10.6 10.2	9.1 8.5 8.6 8.3 8.1	MAY 8.1 8.1 8.1 7.6 7.7	8.8 8.3 8.3 7.9 7.9
1 2 3 4 5		FEBRUARY		13.9 13.8 13.9 13.5 13.1	MARCH 13.7 13.3 13.5 13.0	13.8 13.7 13.7 13.3	11.0 11.2 11.0 10.5	APRIL 10.9 10.9 10.3 9.5	10.9 11.1 10.6 10.2	9.1 8.5 8.6 8.3 8.1	MAY 8.1 8.1 7.6 7.7 7.8 7.3	8.8 8.3 8.3 7.9 7.9
1 2 3 4 5		FEBRUARY		13.9 13.8 13.9 13.5 13.1 13.2 13.3	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.8 12.8	13.8 13.7 13.7 13.3 13.0 13.0	11.0 11.2 11.0 10.5 	10.9 10.9 10.3 9.5	10.9 11.1 10.6 10.2	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4	MAY 8.1 8.1 7.6 7.7 7.8 7.3 7.8	8.8 8.3 8.3 7.9 7.9
1 2 3 4 5		FEBRUARY		13.9 13.8 13.9 13.5 13.1	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9	13.8 13.7 13.7 13.3 13.0	11.0 11.2 11.0 10.5	APRIL 10.9 10.9 10.3 9.5	10.9 11.1 10.6 10.2	9.1 8.5 8.6 8.3 8.1	MAY 8.1 8.1 7.6 7.7 7.8 7.3	8.8 8.3 8.3 7.9 7.9
1 2 3 4 5 6 7 8 9	 14.8 14.4	FEBRUARY 12.8 13.3	 14.1 13.7	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 13.2	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.8 12.9 12.8 12.4 11.8	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8	11.0 11.2 11.0 10.5 10.3	APRIL 10.9 10.9 10.3 9.5 8.9	10.9 11.1 10.6 10.2 9.5	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6 8.9	MAY 8.1 8.1 7.6 7.7 7.8 7.3 7.8 8.0 7.8	8.8 8.3 8.3 7.9 7.9 8.0 7.6 8.2 8.3
1 2 3 4 5 6 7 8 9 10	 14.8 14.4 14.2	FEBRUARY 12.8 13.3 13.8 13.9	 14.1 13.7	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 12.5	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.8 12.9 11.8 11.8	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8 12.3	11.0 11.2 11.0 10.5 10.3	APRIL 10.9 10.9 10.3 9.5 8.9 8.8 8.6	10.9 11.1 10.6 10.2 9.5	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6	MAY 8.1 8.1 7.6 7.7 7.8 7.8 8.0	8.8 8.3 7.9 7.9 8.0 7.6 8.2 8.3 8.3
1 2 3 4 5 6 7 8 9 10	 14.8 14.4 14.2 14.2	FEBRUARY 12.8 13.3 13.8 13.9 14.0	 14.1 13.7 13.9 14.1	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 13.2 12.5	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.8 12.4 11.8 11.8 12.0 11.7	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8 12.3 12.2	11.0 11.2 11.0 10.5 10.3 10.5 9.1 9.9	APRIL 10.9 10.9 10.3 9.5 8.9 8.8 8.6 9.0	10.9 11.1 10.6 10.2 9.5 9.4 8.9 9.6	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6 8.9	MAY 8.1 8.1 7.6 7.7 7.8 7.3 7.8 7.8 7.6 7.7	8.8 8.3 7.9 7.9 8.0 7.6 8.2 8.3 8.3 7.8 7.8 7.9
1 2 3 4 5 6 7 8 9 10	 14.8 14.4 14.2	FEBRUARY 12.8 13.3 13.8 13.9	 14.1 13.7	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 12.5	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.8 12.9 11.8 11.8	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8 12.3	11.0 11.2 11.0 10.5 10.3	APRIL 10.9 10.9 10.3 9.5 8.9 8.8 8.6	10.9 11.1 10.6 10.2 9.5	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6 8.9	MAY 8.1 8.1 7.6 7.7 7.8 7.3 7.8 7.8 7.6 7.7	8.8 8.3 7.9 7.9 8.0 7.6 8.2 8.3 8.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	 14.8 14.4 14.2 14.2 14.4 14.6 14.7	FEBRUARY 12.8 13.3 13.8 13.9 14.0 13.8 14.4	 14.1 13.7 13.9 14.1 14.2 14.3 14.5	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 12.5 12.5 12.5 11.8 11.7	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.8 12.4 11.8 11.8 12.0 11.7 11.0 10.8	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8 12.3 12.2 12.4 12.2 11.5	11.0 11.2 11.0 10.5 10.3 10.5 9.1 9.9 10.3 9.9	APRIL 10.9 10.9 10.3 9.5 8.9 8.8 8.6 9.0 9.2 9.2	10.9 11.1 10.6 10.2 9.5 9.4 8.9 9.6 10.0 9.6	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6 8.9 8.0 8.1 7.8 7.8	MAY 8.1 8.1 7.6 7.7 7.8 7.3 7.8 8.0 7.6 7.7 7.6 7.7	8.8 8.3 8.3 7.9 7.9 8.0 7.6 8.2 8.3 7.8 7.8 7.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14	 14.8 14.4 14.2 14.2 14.2	FEBRUARY 12.8 13.3 13.8 13.9 14.0 13.8	14.1 13.7 13.9 14.2 14.3	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 13.2 12.5 12.5 12.5 12.5 11.8	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.8 12.4 11.8 11.8 12.0 11.7 11.0	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8 12.3 12.2 12.4 12.2 11.5	11.0 11.2 11.0 10.5 10.3 10.5 9.1 9.9	APRIL 10.9 10.9 10.3 9.5 8.9 8.8 8.6 9.0 9.2	10.9 11.1 10.6 10.2 9.5 9.4 8.9 9.6 10.0	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6 8.9 8.0 8.0	MAY 8.1 8.1 7.6 7.7 7.8 7.3 7.8 7.7 8.0 7.8 7.6 7.7 7.6 7.4 7.2	8.8 8.3 8.3 7.9 7.9 8.0 7.6 8.2 8.3 8.3 7.8 7.8 7.7 7.6
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	 14.8 14.4 14.2 14.2 14.4 14.6 14.7	FEBRUARY 12.8 13.3 13.8 13.9 14.0 13.8 14.4 14.5 14.3	 14.1 13.7 13.9 14.1 14.2 14.3 14.5	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 12.5 12.5 12.6 12.5 11.8 11.7	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.8 12.4 11.8 11.8 11.0 11.7 11.0 10.8	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8 12.3 12.2 12.4 12.2 11.5 11.5 11.2	11.0 11.2 11.0 10.5 10.3 10.5 9.1 9.9 10.3 9.9	APRIL 10.9 10.9 10.3 9.5 8.9 8.8 8.6 9.0 9.2 9.2 9.8 10.8 10.8	10.9 11.1 10.6 10.2 9.5 9.4 8.9 9.6 10.0 9.6	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6 8.9 8.0 8.1 7.8 7.6 7.7	MAY 8.1 8.1 7.6 7.7 7.8 7.3 7.8 8.0 7.6 7.7 7.6 7.7 7.6 7.7 7.6 7.7 7.6 7.2 7.2 7.3	8.8 8.3 8.3 7.9 7.9 8.0 7.6 8.2 8.3 7.8 7.7 7.6 7.5 7.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	14.8 14.4 14.2 14.4 14.6 14.7 14.9 15.1 14.7	FEBRUARY 12.8 13.3 13.8 13.9 14.0 13.8 14.4 14.4 14.5 14.3 13.4	14.1 13.7 13.9 14.1 14.2 14.3 14.5 14.6 14.7 14.5 14.2	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 13.2 12.5 12.5 12.6 12.5 11.8 11.7	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.4 11.8 11.8 12.0 11.7 11.0 10.8 11.3 11.6 11.1 10.3	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8 12.3 12.2 12.4 12.2 11.5 11.2	11.0 11.2 11.0 10.5 10.3 10.5 9.1 9.9 10.3 9.9 10.8 11.4 11.3 10.8	APRIL 10.9 10.9 10.3 9.5 8.9 8.8 8.6 9.0 9.2 9.2 9.2 9.8 10.8 10.8 10.8	10.9 11.1 10.6 10.2 9.5 9.4 8.9 9.6 10.0 9.6	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6 8.9 8.0 8.1 7.8 7.6	MAY 8.1 8.1 7.6 7.7 7.8 7.3 7.8 8.0 7.8 7.6 7.7 7.6 7.7 7.6 7.6 7.6 7.7	8.8 8.3 7.9 7.9 8.0 7.6 8.2 8.3 8.3 7.8 7.7 7.6
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	 14.8 14.4 14.2 14.2 14.2 14.4 14.6 14.7	FEBRUARY 12.8 13.3 13.8 13.9 14.0 13.8 14.4 14.4 14.5 14.3 13.4 13.1	 14.1 13.7 13.9 14.1 14.2 14.3 14.5 14.6 14.7 14.5 14.2	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 12.5 12.5 12.6 12.5 11.8 11.7	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.8 12.4 11.8 11.8 11.0 11.7 11.0 10.8	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8 12.3 12.2 11.5 11.5 11.5 11.6 10.8 10.2	11.0 11.2 11.0 10.5 10.3 10.5 9.1 9.9 10.3 9.9 10.8 11.4 11.3 10.8	APRIL 10.9 10.9 10.3 9.5 8.9 8.8 8.6 9.0 9.2 9.2 9.8 10.8 10.8 10.3 9.6	10.9 11.1 10.6 10.2 9.5 9.4 8.9 9.6 10.0 9.6 10.3 11.2 11.1 10.7	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6 8.9 8.0 8.1 7.8 7.6 7.7 7.9 7.8	MAY 8.1 8.1 7.6 7.7 7.8 7.3 7.8 8.0 7.8 7.6 7.7 7.6 7.6 7.6 7.6 7.6	8.8 8.3 8.3 7.9 7.9 8.0 7.6 8.2 8.3 7.8 7.7 7.6 7.5 7.5 7.5 7.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	14.8 14.4 14.2 14.2 14.4 14.6 14.7 14.9 15.1 14.5 14.6	FEBRUARY 12.8 13.3 13.8 14.0 13.8 14.4 14.5 14.3 13.4 13.1 13.8	14.1 13.7 13.9 14.1 14.2 14.3 14.5 14.6 14.7 14.2 13.9 14.9	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 13.2 12.5 12.5 12.6 12.5 11.8 11.7 12.6 12.4 11.9	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.8 11.8 11.0 11.7 11.0 10.8 11.3 11.6 11.1 10.3 9.8	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8 12.3 12.2 12.4 12.2 11.5 11.2	11.0 11.2 11.0 10.5 10.3 10.5 9.1 9.9 10.3 9.9 10.8 11.4 11.3 10.8 10.3	APRIL 10.9 10.9 10.3 9.5 8.9 8.8 8.6 9.0 9.2 9.2 9.2 9.8 10.8 10.8 10.3 9.6	10.9 11.1 10.6 10.2 9.5 9.4 8.9 9.6 10.0 9.6	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6 8.9 8.0 8.0 8.1 7.8 7.8 7.6 7.7 7.9 7.8	MAY 8.1 8.1 7.6 7.7 7.8 7.3 7.8 8.0 7.8 7.6 7.7 7.6 7.7 7.6 7.6 7.7 7.6 7.7 7.7	8.8 8.3 7.9 7.9 8.0 7.6 8.2 8.3 8.3 7.8 7.7 7.6 7.5 7.3 7.5 7.8 7.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	14.8 14.4 14.2 14.2 14.4 14.6 14.7	FEBRUARY 12.8 13.3 13.8 13.9 14.0 13.8 14.4 14.4 14.5 14.3 13.4 13.1 13.8 15.0 14.9	 14.1 13.7 13.9 14.1 14.2 14.3 14.5 14.6 14.7 14.5 14.2 13.9	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 12.5 12.5 12.6 12.5 11.8 11.7 12.6 12.4 11.9 11.1 10.5	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.8 12.9 11.8 11.8 11.8 11.0 11.7 11.0 10.8 11.3 11.6 11.1 10.3 9.8 10.1 11.0 11.7	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8 12.3 12.2 11.5 11.2 12.6 10.8 10.8 11.4 11.8	11.0 11.2 11.0 10.5 10.3 10.5 9.1 9.9 10.3 9.9 10.8 11.4 11.3 10.8 10.3	APRIL 10.9 10.9 10.3 9.5 8.9 8.8 8.6 9.0 9.2 9.2 9.8 10.8 10.8 10.3 9.6 8.3 8.4 9.2	10.9 11.1 10.6 10.2 9.5 9.4 8.9 9.6 10.0 9.6 10.3 11.2 11.1 10.7 10.0 9.3 8.8 8.8 8.8	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6 8.9 8.0 8.1 7.8 7.4 7.7 7.9 7.8	MAY 8.1 8.1 8.1 7.6 7.7 7.8 7.3 7.8 8.0 7.8 7.6 7.7 7.7 7.6 7.4 7.2 7.2 7.3 7.6 7.7 8.5 8.4	8.8 8.3 8.3 7.9 7.9 8.0 7.6 8.2 8.3 7.8 7.7 7.5 7.5 7.8 7.7 8.2 8.6
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	14.8 14.4 14.2 14.2 14.4 14.6 14.7 14.9 15.1 14.5 14.6 15.5 16.4 16.0	FEBRUARY 12.8 13.3 13.8 13.9 14.0 13.8 14.4 14.5 14.3 13.1 13.8 15.0 14.9	14.1 13.7 13.9 14.1 14.2 14.3 14.5 14.6 14.7 14.2 13.9 14.9 15.4 15.4 15.4 11.9	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 13.2 12.5 12.5 12.6 12.5 11.8 11.7 12.6 12.4 11.1 10.5	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.8 11.8 11.8 11.0 11.7 11.0 10.8 11.3 11.6 11.1 10.3 9.8 10.1 11.7 11.9	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8 12.3 12.2 12.4 12.2 11.5 11.2 12.0 12.1 11.6 10.8 11.4 11.8	11.0 11.2 11.0 10.5 10.3 10.5 9.1 9.9 10.3 9.9 10.8 11.4 11.3 10.8 10.3	APRIL 10.9 10.3 9.5 8.9 8.8 8.6 9.0 9.2 9.2 9.8 10.8 10.8 10.3 9.6 8.3 8.4 9.2 10.1	10.9 11.1 10.6 10.2 9.5 9.4 8.9 9.6 10.0 9.6 10.3 11.2 11.1 10.7 10.0	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6 8.9 8.0 8.0 8.1 7.8 7.8 7.6 7.7 7.9 7.8	MAY 8.1 8.1 7.6 7.7 7.8 7.3 7.8 8.0 7.8 7.6 7.7 7.6 7.6 7.7 7.6 7.4 7.2 7.2 7.6 7.6 7.7 8.5 8.4 8.5	8.8 8.3 7.9 7.9 8.0 7.6 8.2 8.3 8.3 7.8 7.7 7.6 7.5 7.3 7.7 8.2 8.6 8.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	14.8 14.4 14.2 14.2 14.4 14.6 14.7 14.9 15.1 14.7 14.5 15.5 16.4 16.0 15.5	FEBRUARY 12.8 13.3 13.8 13.9 14.0 13.8 14.4 14.4 14.5 14.3 13.4 13.1 13.8 15.0 14.9	13.9 14.1 13.7 13.9 14.1 14.2 14.3 14.5 14.6 14.7 14.5 14.5 14.9 15.4 e14.9	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 12.5 12.5 12.6 12.5 11.8 11.7 12.6 12.4 11.9 11.1 10.5	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.8 12.4 11.8 11.0 11.7 11.0 10.8 11.3 11.6 11.1 10.3 9.8 10.1 11.7 11.9 12.0	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8 12.3 12.2 11.5 11.2 11.6 10.8 10.8 10.8 11.4 11.8 12.0 12.1	11.0 11.2 11.0 10.5 10.3 10.5 9.1 9.9 10.3 9.9 10.8 11.4 11.3 10.8 10.3 9.9	APRIL 10.9 10.9 10.3 9.5 8.9 8.8 8.6 9.0 9.2 9.2 9.8 10.8 10.3 9.6 8.3 8.4 9.2 10.1 10.1	10.9 11.1 10.6 10.2 9.5 9.4 8.9 9.6 10.0 9.6 10.3 11.2 11.1 10.7 10.0 9.3 8.8 810.2 10.6 10.3	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6 8.9 8.0 8.1 7.8 7.4 7.7 7.9 7.8 8.5 8.9 8.9	MAY 8.1 8.1 8.1 7.6 7.7 7.8 7.3 7.8 8.0 7.7 7.7 7.6 7.4 7.2 7.3 7.6 7.6 7.7 8.5 8.4 8.5 8.7	8.8 8.3 8.3 7.9 7.9 8.0 7.6 8.2 8.3 7.8 7.7 7.6 7.5 7.5 7.8 7.7 8.2 8.6 8.8 8.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	14.8 14.4 14.2 14.2 14.4 14.6 14.7 14.9 15.1 14.7 14.5 14.6	FEBRUARY 12.8 13.3 13.8 13.9 14.0 13.8 14.4 14.5 14.3 13.1 13.8 15.0 14.9	14.1 13.7 13.9 14.1 14.2 14.3 14.5 14.6 14.7 14.2 13.9 14.9 15.4 15.4 15.4	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 13.2 12.5 12.5 12.6 12.5 11.8 11.7 12.6 12.4	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.8 11.8 11.8 11.0 11.7 11.0 10.8 11.3 11.6 11.1 10.3 9.8 10.1 11.7 11.9 12.0 12.0	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8 12.3 12.2 12.4 12.2 11.5 11.2 12.0 12.1 11.6 10.8 11.4 11.8 12.0 12.1	11.0 11.2 11.0 10.5 10.3 10.5 9.1 9.9 10.3 9.9 10.8 11.4 11.3 10.8 10.3 9.8 9.3 10.7 10.9 10.6	APRIL 10.9 10.9 10.3 9.5 8.9 8.8 8.6 9.0 9.2 9.2 9.2 9.8 10.8 10.8 10.3 9.6 8.3 8.4 9.2 10.1 10.1	10.9 11.1 10.6 10.2 9.5 9.4 8.9 9.6 10.0 9.6 10.3 11.2 11.17 10.0 9.3 8.8 10.2 10.3	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.6 8.9 8.0 8.0 8.1 7.8 7.6 7.4 7.7 7.9 7.8 8.5 8.9 8.9	MAY 8.1 8.1 7.6 7.7 7.8 7.3 7.8 8.0 7.8 7.6 7.7 7.6 7.7 7.6 7.4 7.2 7.2 7.3 7.6 7.6 7.7 8.5 8.7	8.8 8.3 7.9 7.9 8.0 7.6 8.2 8.3 8.3 7.8 7.7 7.6 7.5 7.3 7.7 8.2 8.6 8.8 8.8 8.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	14.8 14.4 14.2 14.2 14.4 14.6 14.7 14.9 15.1 14.7 14.5 14.6 15.5 16.4 16.0 15.5	FEBRUARY 12.8 13.3 13.8 13.9 14.0 13.8 14.4 14.4 14.5 14.3 13.4 13.1 13.8 15.0 14.9 11.9 12.5	13.9 14.1 13.7 13.9 14.1 14.2 14.3 14.5 14.6 14.7 14.5 14.5 14.5 14.9 15.4 el4.9	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 13.2 12.5 12.6 12.5 11.8 11.7 12.6 12.4 11.9 11.1 10.5 11.1 11.1 12.2 12.4 11.9 11.1 12.2	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.8 12.4 11.8 11.8 11.0 11.7 11.0 10.8 11.3 11.6 11.1 10.3 9.8 10.1 11.7 11.9 12.0 12.0 12.0	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.2 12.4 12.2 11.5 11.2 11.6 10.8 10.8 10.8 11.4 11.8 12.0 12.1	11.0 11.2 11.0 10.5 10.3 10.5 9.1 9.9 10.3 9.9 10.8 11.4 11.3 10.8 10.3	APRIL 10.9 10.9 10.9 20.5 8.9 8.8 8.6 9.0 9.2 9.2 9.8 10.8 10.8 10.3 9.6 8.3 8.4 9.2 10.1 10.1	10.9 11.1 10.6 10.2 9.5 9.4 8.9 9.6 10.0 9.6 10.3 11.2 11.1 10.7 10.0 9.3 8.8 10.2 10.6 10.3	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6 8.9 8.0 8.1 7.8 7.4 7.7 7.9 7.8 8.5 8.9 8.9	MAY 8.1 8.1 8.1 7.6 7.7 7.8 7.3 7.8 8.0 7.7 7.7 7.6 7.4 7.2 7.3 7.6 7.6 7.7 8.5 8.4 8.5 8.7	8.8 8.3 8.3 7.9 7.9 8.0 7.6 8.2 8.3 8.3 7.8 7.5 7.6 7.5 7.5 7.8 7.7 8.2 8.6 8.8 8.8 8.8 8.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	14.8 14.4 14.2 14.2 14.4 14.6 14.7 14.9 15.1 14.7 14.5 14.6 15.5 16.4 16.0 15.5	FEBRUARY 12.8 13.3 13.8 13.9 14.0 13.8 14.4 14.5 14.3 13.1 13.8 15.0 14.9 11.9 12.5	14.1 13.7 13.9 14.1 14.2 14.3 14.5 14.6 14.7 14.2 13.9 14.9 15.4 15.4 15.4 15.4 15.4 15.4 15.4	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 13.2 12.5 12.5 12.6 12.5 11.8 11.7 12.6 12.4 11.1 10.5 11.1 11.8 12.1 12.2	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.8 11.8 11.8 11.0 11.7 11.0 10.8 11.3 11.6 11.1 10.3 9.8 10.1 11.7 11.9 12.0 12.0 12.0 12.0 11.6	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8 12.3 12.2 11.5 11.2 12.0 12.1 11.6 10.8 10.2 10.8 11.4 11.8 12.2 12.2 12.1	11.0 11.2 11.0 10.5 10.3 10.5 9.9 10.3 9.9 10.8 11.4 11.3 10.8 10.3 9.8 9.3 10.7 10.9 10.6	APRIL 10.9 10.9 10.3 9.5 8.9 8.8 8.6 9.0 9.2 9.2 9.8 10.8 10.8 10.3 9.6 8.3 8.4 9.2 10.1 10.1	10.9 11.1 10.6 10.2 9.5 9.4 8.9 9.6 10.0 9.6 10.3 11.2 11.1 10.7 10.0 9.3 8.8 10.2 10.3 10.3	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.6 8.9 8.0 8.0 8.1 7.8 7.6 7.4 7.7 7.9 7.8 8.5 8.9 8.9 8.9	MAY 8.1 8.1 7.6 7.7 7.8 7.3 7.8 8.0 7.8 7.6 7.7 7.6 7.4 7.2 7.2 7.3 7.6 7.6 7.7 8.5 8.1 8.5 8.7	8.8 8.3 7.9 7.9 8.0 7.6 8.2 8.3 8.3 7.8 7.7 7.6 7.5 7.3 7.7 8.2 8.6 8.8 8.8 8.8 8.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	14.8 14.4 14.2 14.2 14.4 14.6 14.7 14.9 15.1 14.7 14.5 14.6 15.5 16.4 16.0 15.5	FEBRUARY 12.8 13.3 13.8 13.9 14.0 13.8 14.4 14.4 14.5 14.3 13.4 13.1 13.8 15.0 14.9 11.9 12.5	13.9 14.1 13.7 13.9 14.1 14.2 14.3 14.5 14.6 14.7 14.5 14.5 14.5 14.9 15.4 el4.9	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 13.2 12.5 12.6 12.5 11.8 11.7 12.6 12.4 11.9 11.1 10.5 11.1 11.1 12.2 12.4 11.9 11.1 12.2	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.8 12.4 11.8 11.8 11.0 11.7 11.0 10.8 11.3 11.6 11.1 10.3 9.8 10.1 11.7 11.9 12.0 12.0 12.0	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.2 12.4 12.2 11.5 11.2 11.6 10.8 10.8 10.8 11.4 11.8 12.0 12.1	11.0 11.2 11.0 10.5 10.3 10.5 9.1 9.9 10.3 9.9 10.8 11.4 11.3 10.8 10.3	APRIL 10.9 10.9 10.9 20.5 8.9 8.8 8.6 9.0 9.2 9.2 9.8 10.8 10.8 10.3 9.6 8.3 8.4 9.2 10.1 10.1	10.9 11.1 10.6 10.2 9.5 9.4 8.9 9.6 10.0 9.6 10.3 11.2 11.1 10.7 10.0 9.3 8.8 10.2 10.6 10.3	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6 8.9 8.0 8.1 7.8 7.4 7.7 7.9 7.8 8.5 8.9 8.9	MAY 8.1 8.1 8.1 7.6 7.7 7.8 7.3 7.8 8.0 7.7 7.7 7.6 7.4 7.2 7.3 7.6 7.6 7.7 8.5 8.4 8.5 8.7	8.8 8.3 8.3 7.9 7.9 8.0 7.6 8.2 8.3 8.3 7.8 7.5 7.6 7.5 7.5 7.8 7.7 8.2 8.6 8.8 8.8 8.8 8.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	14.8 14.4 14.2 14.2 14.4 14.6 14.7 14.9 15.1 14.7 14.5 14.6 15.5 16.4 16.0 15.5 16.3	FEBRUARY 12.8 13.3 13.8 13.9 14.0 13.8 14.4 14.5 14.3 13.1 13.8 15.0 14.9 11.9 12.5	14.1 13.7 13.9 14.1 14.2 14.3 14.5 14.6 14.7 14.5 14.2 13.9 14.9 15.4 15.4 15.4 15.4 15.4	13.9 13.8 13.9 13.5 13.1 13.2 13.3 13.5 13.2 12.5 12.5 12.6 11.8 11.7 12.6 12.4 11.9 11.1 10.5 11.1 12.2 12.2	MARCH 13.7 13.3 13.5 13.0 12.8 12.8 12.9 12.4 11.8 11.0 10.8 11.7 11.0 10.8 11.3 11.6 11.1 10.3 9.8 10.1 11.7 11.0 11.7 11.0 12.0 12.0 12.0 12.0 11.6 11.3	13.8 13.7 13.7 13.3 13.0 13.1 13.2 12.8 12.3 12.2 12.4 12.2 11.5 11.2 12.0 12.1 11.6 10.8 10.2 10.8 11.4 11.8 12.0 12.1 11.8 12.1 12.1 12.1 12.1 12.1 12.1	11.0 11.2 11.0 10.5 10.3 10.5 9.1 9.9 10.3 9.9 10.8 11.4 11.3 10.8 10.3	APRIL 10.9 10.9 10.3 9.5 8.9 8.8 8.6 9.0 9.2 9.2 9.2 9.8 10.8 10.8 10.3 9.6 8.3 8.4 9.2 10.1 10.1	10.9 11.1 10.6 10.2 9.5 9.4 8.9 9.6 10.0 9.6 10.3 11.2 11.1 10.7 10.0	9.1 8.5 8.6 8.3 8.1 8.2 7.8 8.4 8.6 8.9 8.0 8.1 7.8 7.6 7.4 7.7 7.8 8.5 8.9 8.9 8.5 8.9	MAY 8.1 8.1 7.6 7.7 7.8 7.3 7.8 8.0 7.8 7.6 7.7 7.6 7.4 7.2 7.2 7.3 7.6 7.7 8.5 8.4 8.5 8.7 8.5 8.7	8.8 8.3 7.9 7.9 8.0 7.6 8.2 8.3 8.3 7.8 7.7 7.6 7.5 7.3 7.5 7.3 7.5 7.7 8.2 8.6 8.8 8.8 8.8

06889000 KANSAS RIVER AT TOPEKA, KS--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMB	ER
1 2 3 4 5	9.8 10.0 9.2 8.4 8.2	8.5 9.0 8.4 7.4 7.9	9.0 9.6 8.9 e7.8 8.0	7.6 7.9 7.9 7.9 7.9	7.4 7.5 7.7 7.6 7.5	7.5 7.7 7.8 7.7 7.7	11.3 8.8 7.8 7.1 7.2	6.8 7.0 6.6 6.5 6.6	8.7 7.9 7.2 6.7	8.1 8.2 8.3 8.5 9.9	7.2 7.8 7.8 7.8 7.9	7.8 8.0 8.0 8.1 8.7
6 7 8 9 10	8.2 8.2 8.3 8.2	7.8 7.4 8.0 7.9 7.9	7.9 7.9 8.1 8.2 8.2	8.1 8.1 8.2 8.1 9.1	7.8 7.6 7.4 7.4	7.9 7.8 7.8 7.7 8.0	7.3 7.2 7.4 7.8 7.8	6.7 6.8 6.9 6.9	7.0 7.0 7.1 7.3 7.3	10.7 10.4 12.1 12.5 12.8	8.2 8.0 8.3 8.7 9.1	9.1 9.8 10.4 10.7
11 12 13 14 15	8.1 8.0 8.1 8.3 8.4	7.9 7.8 7.8 7.9 8.1	8.0 7.9 7.9 8.1 8.3	10.1 9.9 10.9 12.4 13.2	7.7 8.0 8.7 8.3 8.6	8.7 8.8 9.6 10.2	8.6 8.6 9.7 11.0 10.0	7.5 7.4 7.2 7.3 7.7	8.0 8.0 8.2 8.6 8.7	11.8 10.7 10.2 10.5 9.6	8.9 8.6 8.5 8.4 8.6	10.2 9.5 9.2 9.3 9.2
16 17 18 19 20	8.2 8.2 8.1 8.3 8.6	8.0 7.8 7.5 8.0 7.7	8.1 8.1 7.8 8.1 8.3	12.6 11.0 13.0 12.9 12.4	8.5 7.7 7.5 7.5 7.5	10.3 9.1 9.9 9.8 9.7	10.9 11.3 12.5 14.0 13.9	7.9 7.7 8.0 7.7 7.7	9.3 9.1 10.0 10.5	9.0 8.8 8.1 8.0 7.9	7.5 8.1 6.5 6.9 7.3	8.5 8.5 7.0 7.7 7.7
21 22 23 24 25	7.8 8.2 8.1 8.0 8.0	7.3 7.4 7.6 7.8 7.8	7.6 7.9 7.9 7.9 7.9	9.7 11.8 11.2 10.6 10.1	7.4 7.2 7.1 7.4	8.4 9.3 8.9 8.8 8.6	13.2 13.6 12.2 12.6	7.5 7.0 6.9 7.5	9.9 9.8 9.0 e9.6	7.5 7.5 8.7 9.0 9.2	7.2 7.2 6.9 8.0 8.9	7.3 7.8 8.8 9.0
26 27 28 29 30 31	8.5 7.4 7.4 7.5 7.7	7.2 7.2 7.3 7.3 7.4	7.7 7.3 7.4 7.4 7.5	10.3 10.0 10.1 8.7 7.9 8.8	7.3 7.3 6.9 6.3 6.5	8.5 8.4 8.3 7.0 7.2 7.7	 7.2 7.2 7.7 7.9	 6.9 6.9 7.1 7.2	7.0 7.1 7.5 7.6	9.3 9.1 9.2 9.3 9.4	8.9 8.8 8.8 9.1	9.0 8.9 8.9 9.1 9.3
MONTH	10.0	7.2	8.0	13.2	6.3	8.6	14.0	6.5	8.3	12.8	6.5	8.7
YEAR	16.4	6.3	10.2									

e Estimated

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 20 MIN DAY MAX MIN MEAN MAX MIN MEAN MAX MIN MEAN MAX MEAN OCTOBER NOVEMBER DECEMBER JANUARY 3 4 ---------25 12 31 ---------32 43 30 ------------------------------___ ___ ---------___ ___ ___ ------------------49 27 24 22 23 24 25 -26___ ------------------------------------27 ---------------------------29 30 ------25 ------___ ___ ___ ---------------MONTH

06889000 KANSAS RIVER AT TOPEKA, KS--Continued

e Estimated

> Actual value is known to be greater than the value shown

06889160 SOLDIER CREEK NEAR CIRCLEVILLE, KS

LOCATION.--Lat $39^{\circ}27^{\circ}47^{\circ}$, long $95^{\circ}57^{\circ}00^{\circ}$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ NE $^{1}/_{4}$ sec.10, T.7 S., R.13 E., Jackson County, Hydrologic Unit 10270102, on right bank at downstream side of bridge on Kansas Highway 16, 5.8 mi southwest of Circleville, and at mile 55.2.

DRAINAGE AREA.--49.3 mi².

PERIOD OF RECORD. -- March 1964 to March 2001 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,094.58 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Satellite telemeter at station.

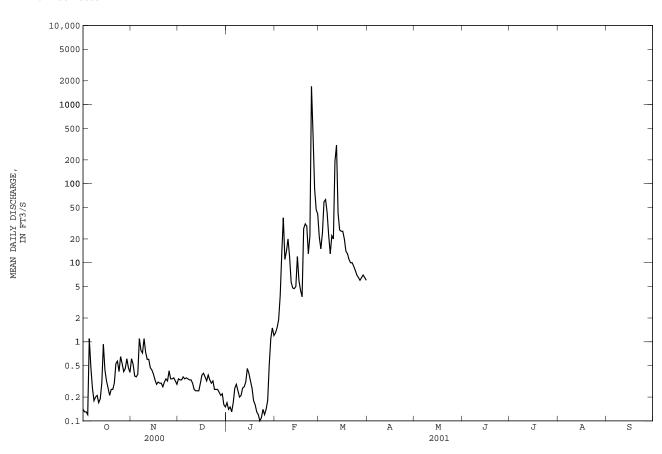
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ${\rm ft}^3/{\rm s}$ and maximum (*):

Date	Tim	ne	Discharge (ft³/s)	Gag	ge height (ft)		Date	Time		Discharge (ft ³ /s)		height ft)
Feb 24	114	15	*3,450	:	*14.49		No other	r peak gr	eater th	an base dis	charge.	
		DISCHA	ARGE, CUBIC	FEET PI		WATER YEA Y MEAN VAI		2000 TO	SEPTEMBE	R 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.61	.34	.17	1.3	21						
2	.13	.52	.33	.14	1.5	15						
3	.13	.37	. 33	.15	1.9	24						
4	.12	.36	. 36	.13	3.8	59						
5	1.1	.39	.34	.17	13	63						
6	.48	1.1	.35	.26	37	43						
7	.26	.78	.34	. 29	11	22						
8	.18	.72	. 33	. 24	14	13						
9	.20	1.1	.33	.20	20	22						
10	.21	.74	e.30	.21	12	20						
11	.17	.60	e.25	.26	5.7	193						
12	.19	.60	e.24	. 27	4.8	307						
13	.30	.47	e.24	.31	4.7	42						
14	.93	.44	e.24	.46	e5.0	26						
15	.44	.39	e.30	.40	e12	25						
16	.32	.33	e.38	.32	e5.9	25						
17	.26	.29	e.40	.26	e4.5	20						
18	.21	.31	e.36	.18	3.7	14						
19	.25	.30	e.32	.16	27	13						
20	.25	.30	e.38	.13	31	11						
21	.30	.27	e.33	.12	29	10						
22	.53	.31	e.30	.10	13	10						
23	.57	.34	e.32	.11	22	e9.0						
24	.42	.32	e.25	.14	1700	e8.0						
25	.65	.43	e.25	.12	412	e7.0						
26	.53	.34	e.25	.14	86	e6.5						
27	.42	.34	.23	.14	47	e6.0						
28	.46	.35	.21	.51	41	e6.5						
29	.61	.32	.22	1.1	41	e7.0						
30	.47	.29	.16	1.5		e6.5						
31	.41		.15	1.2		e6.0						
MEDAN	20	4.7	20	20	01.0	24.0						
MEAN	.38	.47	. 29	.32	91.8	34.2						
MAX MIN	1.1 .12	1.1 .27	.40 .15	1.5 .10	1700 1.3	307 6.0						
AC-FT	23	28	18	20	5100	2100						
AC-FI	23	20	10	20	2100	2100						

06889160 SOLDIER CREEK NEAR CIRCLEVILLE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	19.9 181 1974 .27 1989	20.0 155 1999 .47 2001	12.1 86.3 1973 .29 2001	10.2 59.8 1974 .32 2001	26.6 98.1 1971 .76 1989	47.4 248 1973 .93 1967	250 1984 1.06	61.9 265 1995 1.42 1989	65.8 433 1984 2.08 1988	31.5 346 1993 .13 1989	14.3 121 1968 .42 1991	29.2 175 1973 .12 1991
SUMMARY S	STATISTI	ICS			FOR 2000	CALEND	AR YEAR			WATER Y	TEARS 1965	- 2001
ANNUAL ME HIGHEST A LOWEST AN HIGHEST I LOWEST D ANNUAL S MAXIMUM I MAXIMUM I INSTANTAN	ANNUAL M NNUAL ME DAILY ME AILY MEA EVEN-DAY PEAK FLO PEAK STA NEOUS LO	EAN EAN AN MINIMUM DW AGE DW FLOW			11	.10	Jul 4 Sep 12 Sep 11			32.4 89.8 4.6 5830 .0 25300 21.5	Jun 3 Aug 4 Aug Jun 52 Jun	1993 1991 9 1984 18 1989 12 1989 9 1984 9 1984 16 1989
ANNUAL RU 10 PERCEN 50 PERCEN 90 PERCEN	EDS EDS			45	60 3.1 1.3 .23				23460 39 4.6			



06889170 SOLDIER CREEK NEAR HOLTON, KS

LOCATION.--Lat $39^{\circ}26^{\circ}03^{\circ}$, long $95^{\circ}55^{\circ}31^{\circ}$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.23, T.7 S., R.13 E., Jackson County, Hydrologic Unit 10270102, on right bank at downstream side of bridge on County Road 214, 10.5 mi west and 2 mi south of Holton, and at mile 50.9.

DRAINAGE AREA. -- 60.8 mi².

PERIOD OF RECORD.--April 2001 to September 2001.

 ${\tt GAGE.--Water-stage\ recorder.\ Datum\ of\ gage\ is\ 1,055.00\ ft\ above\ sea\ level,\ from\ topographic\ map.}$

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

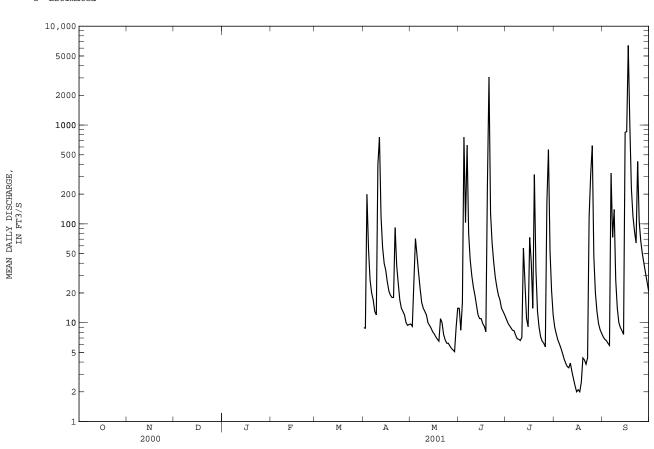
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

Date	Time		Discharge (ft ³ /s)	Gage	height (ft)		Date	Tim	e	Discharge (ft ³ /s)		e height (ft)
Apr 10 Jun 4 Jun 6 Jun 20 Jul 19	2000 0700 0200 0445 0600		3,050 3,250 2,360 10,300 2,130	1 1 1	.2.06 .2.28 .1.24 .7.45		Jul 28 Aug 25 Sep 6 Sep 17	060 060 140 031	10	2,280 2,700 1,650 *20,700	1	11.13 11.66 10.16 21.85
		DISCH	ARGE, CUBIC	FEET PER		WATER YE MEAN VA		R 2000 TC	SEPTEMB:	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	 		 	 	 	 	8.9 8.8 199 56 27	9.7 9.2 26 e71 e48	14 8.4 16 753 103	11 10 9.4 8.9 8.4	9.0 7.7 6.7 6.1 5.5	7.2 6.8 6.6 6.2 5.9
6 7 8 9 10			 		 	 	20 17 13 12 399	e32 e22 e16 e14 e13	625 80 43 30 23	8.3 7.5 6.9 6.8 6.6	4.9 4.3 3.9 3.6 3.5	327 73 140 27 14
11 12 13 14 15	 		 	 	 	 	757 119 58 40 34	12 10 9.4 8.8 8.1	19 15 12 11	7.1 57 25 11 9.1	3.9 3.2 2.7 2.3 2.0	10 8.9 8.3 7.6 844
16 17 18 19 20	 		 	 	 	 	26 21 19 18 18	7.7 7.2 6.8 6.5	9.8 9.2 8.1 252 3060	73 41 14 316 34	2.1 2.0 2.5 4.4 4.2	859 6400 1010 229 119
21 22 23 24 25			 		 	 	92 38 25 17 14	10 7.6 6.7 6.2 6.2	128 64 41 29 23	13 9.0 7.2 6.5 6.2	3.8 4.4 119 320 620	84 64 429 105 67
26 27 28 29 30 31		 	 	 	 	 	13 12 10 9.4 9.6	5.8 5.5 5.3 5.1 9.0	19 17 14 13 12	5.7 166 566 53 21 12	47 20 13 9.8 8.5 7.8	50 40 32 26 21
MEAN MAX MIN AC-FT					 	 	70.4 757 8.8 4190	13.9 71 5.1 853	182 3060 8.1 10830	49.6 566 5.7 3050	40.6 620 2.0 2490	368 6400 5.9 21870

06889170 SOLDIER CREEK NEAR HOLTON, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN							70.4	13.9	182	49.6	40.6	368
MAX							70.4	13.9	182	49.6	40.6	368
(WY)							2001	2001	2001	2001	2001	2001
MIN							70.4	13.9	182	49.6	40.6	368
(WY)							2001	2001	2001	2001	2001	2001



Discharge

06889200 SOLDIER CREEK NEAR DELIA, KS

LOCATION.--Lat 39°12'08", long 95°52'25", in NE $^1/_4$ NW $^1/_4$ NE $^1/_4$ sec.8, T.10 S., R.14 E., Shawnee County, Hydrologic Unit 10270102, on right bank at downstream side of county highway bridge, 5.1 mi upstream from Walnut Creek, 5.5 mi southeast of Delia, and at mile 21.9.

DRAINAGE AREA. -- 157 mi².

PERIOD OF RECORD. -- October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 929.34 ft above sea level. Gage datum lowered 2.0 ft on Oct. 1, 1993. Gage datum lowered 5.0 ft on Oct. 1, 1999.

Discharge

Gage height

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1909, about 24 ft June 21, 1951, from floodmarks and information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

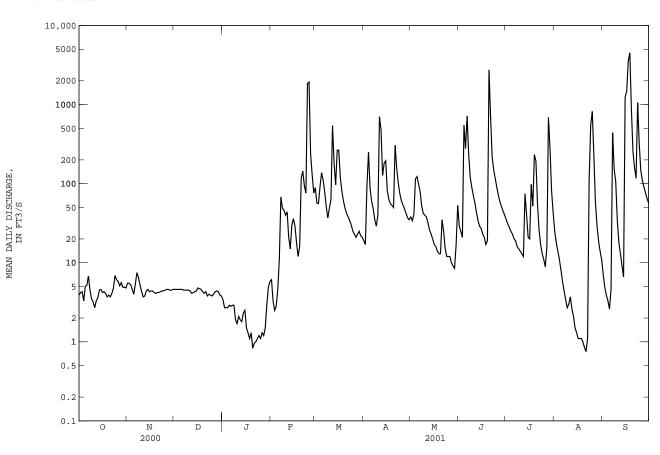
Gage height

Date	Tim	е	(ft ³ /s)	Gas	(ft)		Date	Time	2	(ft ³ /s)	Gage	(ft)
Feb 25 Jun 20	020 200		4,040 4,200		21.95 20.79		Sep 16 Sep 18	011 053		3,420 *6,560		18.72 26.44
		DISCHA	RGE, CUBIC	FEET PI		WATER YE Y MEAN VA		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	3.9 4.2 4.3 3.3 5.0	5.5 5.3 4.6 4.0	4.6 4.6 4.6 4.6	3.4 2.7 2.7 2.7 2.9	6.1 3.3 2.5 2.8 4.6	89 57 56 91 138	19 17 94 251 87	38 34 41 115 123	29 25 21 552 278	35 31 28 25 23	25 18 14 11 8.0	7.1 4.9 3.9 3.3 2.6
6 7 8 9 10	5.2 6.8 4.5 3.5 3.2	5.4 7.5 6.5 5.2 4.3	4.6 4.5 4.5 4.5	2.8 2.9 2.9 1.9	11 68 49 46 40	111 79 51 37 49	60 48 35 29 40	99 79 52 42 40	719 237 121 90 71	20 19 16 15	5.8 4.4 3.4 2.7 3.0	4.6 441 153 106 34
11 12 13 14 15	2.7 3.3 3.6 4.5 4.6	3.7 3.8 4.4 4.6 4.3	4.4 4.1 4.2 4.3 4.4	2.1 1.9 e1.8 e2.3 2.5	44 21 15 30 36	63 541 182 97 264	702 483 127 182 195	38 32 26 23 20	57 43 34 29 27	13 12 75 41 21	3.7 2.6 2.1 1.5	18 13 9.2 6.6 1240
16 17 18 19 20	4.2 4.3 4.1 3.7 3.9	4.4 4.4 4.2 4.1 4.2	4.8 4.7 4.6 4.3 4.1	1.5 1.3 1.1 1.3 .83	29 18 12 16 118	266 117 80 60 49	81 63 56 53 50	17 16 14 13	23 21 17 19 2750	20 98 52 232 193	1.1 1.1 1.1 1.0 .85	1480 3550 4520 886 255
21 22 23 24 25	3.7 4.1 4.8 6.9 6.1	4.2 4.3 4.4 4.4 4.5	4.3 3.8 4.0 3.9 3.8	.96 1.0 1.1 1.2 1.1	144 94 76 1850 1930	42 38 34 30 25	306 157 103 75 61	35 25 15 12 12	723 220 150 116 90	55 26 17 13 11	.75 1.1 111 553 821	160 117 1060 325 148
26 27 28 29 30 31	5.8 5.1 5.6 4.9 4.9	4.6 4.5 4.5 4.6	4.0 4.3 4.4 4.3 3.9 3.8	1.3 1.2 1.5 2.9 4.9 5.8	238 129 76 	23 21 23 25 22 21	54 48 42 37 35	12 10 9.1 8.5 17 53	71 59 51 45 40	8.9 16 690 277 81 43	234 59 30 19 14	110 91 77 65 57
MEAN MAX MIN AC-FT	4.50 6.9 2.7 277	4.68 7.5 3.7 279	4.32 4.8 3.8 266	2.14 5.8 .83 131	182 1930 2.5 10130	89.7 541 21 5520	120 702 17 7120	35.0 123 8.5 2150	224 2750 17 13340	71.6 690 8.9 4410	63.4 821 .75 3900	498 4520 2.6 29650

06889200 SOLDIER CREEK NEAR DELIA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	75.2 484 1974 .005 1992	67.9 605 1999 1.74 1977	45.5 293 1973 1.86 1977	38.1 236 1973 1.22 1977	71.8 316 1973 2.23 1989	135 651 1973 2.67 1967	152 800 1999 3.62 1989	180 1056 1995 2.82 1989	198 1051 1967 4.50 1989	88.9 1139 1993 2.90 1988	46.5 540 1968 .68 1988	98.0 670 1977 .15 2000
SUMMARY	SUMMARY STATISTICS ANNUAL MEAN			2000 CALENI	DAR YEAR	FC	OR 2001 WA	TER YEAR		WATER YEA	RS 1959	- 2001
HIGHEST LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT	ANNUAL MANNUAL MANNUAL MANNUAL MAILY MEA SEVEN-DAY PEAK FLOAT PEAK STATEMENT OF THE PEAK	EAN EAN AN Y MINIMUM OW AGE OW FLOW		21.8 889 .01 .01	Jun 20 Sep 18 Sep 17		107 4520 .75 1.0 6560 26.44 .54	Aug 16 Sep 18 Sep 18		99.6 281 23.1 14800 .00 29400 26.44 .00	Sep 1 Oct Jun Sep 1	1973 2000 9 1982 10 1976 1 1991 9 1982 18 2001 10 1976
10 PERC 50 PERC	RUNOFF (A ENT EXCENT ENT EXCENT ENT EXCENT	EDS EDS		15860 27 6.4 .66			77170 169 16 2.7			72160 154 21 2.8		



Discharge

06889500 SOLDIER CREEK NEAR TOPEKA, KS

LOCATION.--Lat $39^{\circ}06^{\circ}00^{\circ}$, long $95^{\circ}43^{\circ}27^{\circ}$, in SW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.14, T.11 S., R.15 E., Shawnee County, Hydrologic Unit 10270102, on right bank at downstream side of county highway bridge, 1.5 mi upstream from Halfday Creek, 4.0 mi northwest of Topeka, and at mile 6.0.

DRAINAGE AREA.--290 mi².

PERIOD OF RECORD.--May 1929 to September 1932, August 1935 to current year. Prior to October 1935, published as "at Topeka."
Records for October 1932 to July 1935, published in WSP 746, 761, and 786, have been found to be unreliable and should not be

REVISED RECORDS.--WSP 1440: 1929-30(M), 1941-42, 1948(P), 1950. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 862.95 ft above sea level. Prior to July 27, 1935, chain gage at site 2.0 mi downstream at different datum. Aug. 1, 1935, to June 16, 1958, nonrecording gage and June 17, 1958, to May 24, 1960, water-stage recorder, at present site and datum 4.0 ft higher. May 25, 1960, to June 8, 1961, nonrecording gage at site 1.1 mi downstream at datum 1.79 ft lower.

Discharge

Gage height

REMARKS.--Records good. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

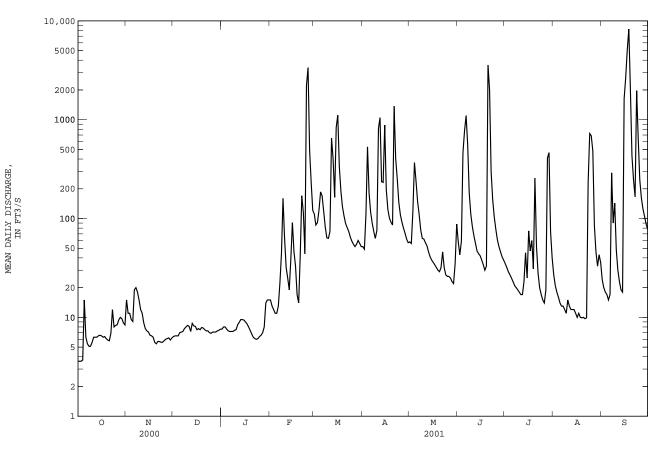
Gage height

Date	Tin	ne	(ft ³ /s)	Gag	(ft)		Date	Time	e e	(ft ³ /s)		(ft)
Feb 24 Jun 21 Sep 15	210 024 230	15	5,090 5,800 6,690		12.18 13.16 14.33		Sep 18 Sep 23	1630 0815		*9,290 3,620		7.43 9.94
		DISCHA	RGE, CUBIC	FEET PE		WATER YE Y MEAN VA		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	3.6 3.6 3.6 3.7	15 11 11 9.5 9.1	6.4 6.5 6.5 6.5 7.0	7.6 8.0 8.0 7.6 7.3	15 13 12 11 11	111 86 91 122 186	52 49 110 531 181	58 56 119 368 240	58 43 59 464 767	35 32 29 27 25	27 21 18 16 14	24 20 18 17 15
6 7 8 9 10	6.3 5.4 5.1 5.1 5.6	19 20 18 15 12	7.1 7.2 7.7 8.0 8.3	7.2 7.2 7.2 7.4 7.5	13 22 44 160 63	169 118 82 64 63	116 90 74 63 76	149 110 77 63 62	1100 568 183 111 83	23 21 20 19 18	13 13 12 11 15	17 290 90 143 48
11 12 13 14 15	6.3 6.3 6.5 6.6	11 8.8 7.7 7.3 7.1	8.1 7.2 8.7 8.2 8.1	8.4 8.9 9.5 9.5 9.4	32 25 19 39 91	74 651 405 164 838	817 1050 236 232 884	57 53 46 41 38	67 56 47 44 42	17 17 23 45 25	13 12 12 12 12	30 23 19 18 1630
16 17 18 19 20	6.5 6.3 6.4 6.1 5.9	6.6 6.5 6.3 5.6 5.4	7.5 7.7 7.5 7.9 7.8	9.0 8.6 8.0 7.4 6.8	46 33 17 14 42	1110 333 189 131 106	196 124 101 92 86	36 34 32 30 29	38 34 30 33 3580	75 47 60 31 256	10 11 10 9.9	2660 5070 8260 2030 430
21 22 23 24 25	5.8 6.9 12 8.0 8.3	5.7 5.7 5.6 5.6 5.8	7.5 7.3 7.3 7.0 6.9	6.3 6.1 6.0 6.1 6.4	170 115 44 2230 3370	89 81 74 65 59	1370 404 253 146 109	32 46 32 27 26	2020 299 155 104 78	52 28 20 17 15	9.7 9.9 230 724 687	246 166 1970 652 247
26 27 28 29 30 31	8.4 9.4 10 9.7 8.8 8.4	6.0 6.1 6.2 5.9 6.2	7.1 7.1 7.1 7.3 7.4 7.6	6.6 7.0 8.0 14 15	489 231 121 	55 52 55 60 56 52	92 80 71 62 57	26 25 23 22 35 88	61 52 46 41 38	14 19 410 465 73 40	482 84 46 33 43 36	163 126 106 89 78
MEAN MAX MIN AC-FT	6.96 15 3.6 428	9.02 20 5.4 537	7.40 8.7 6.4 455	8.29 15 6.0 510	268 3370 11 14860	187 1110 52 11490	260 1370 49 15480	67.1 368 22 4130	343 3580 30 20430	64.5 465 14 3960	85.7 724 9.7 5270	823 8260 15 48980

06889500 SOLDIER CREEK NEAR TOPEKA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN 121 88.2 MAX 1178 1175 (WY) 1974 1999 MIN .000 .000 (WY) 1938 1938	67.1 56.1 475 359 1973 1974 .000 .000 1957 1957	104 382 1937 .17 1957	194 1269 1987 .14 1956	235 1464 1944 1.03 1956	278 1838 1995 5.17 1956	335 2183 1967 4.06 1953	195 2711 1993 1.13 1940	87.5 1130 1968 .27 1957	146 1288 1977 .000 1937
SUMMARY STATISTICS	FOR 2000 CALEN	IDAR YEAR	FC	R 2001 WAT	ER YEAR		WATER YEA	RS 1936	- 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS	61.1 3380 2.4 2.6 44340 67 16 5.1	Jun 20 Sep 17 Sep 13		175 8260 3.6 5.6 9290 17.43 3.4 126500 270 26 6.5	Sep 18 Oct 1 Nov 19 Sep 18 Sep 18 Oct 3		159 590 5.07 17200 .00 30400 27.44 .00 115100 245 30 2.1	Jul 2 Aug 1 Jun Jun	1993 1956 3 1977 4 1936 7 1936 9 1982 9 1982 years



Discharge

06890100 DELAWARE RIVER NEAR MUSCOTAH, KS

LOCATION.--Lat 39°31'17", long 95°31'57", in SW $^1/_4$ SW $^1/_4$ SW $^1/_4$ sec.16, T.6 S., R.17 E., Atchison County, Hydrologic Unit 10270103, on right bank at downstream side of county highway bridge, 2.0 mi south of Muscotah, and at mile 45.5.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--431 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1964-67. July 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 920.88 ft above sea level (Kansas Geological Survey bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1925 reached a stage of 36.5 ft, from information by local residents (discharge not determined). Floods in 1951 and 1967 were lower than the flood of 1925.

Discharge

Gage height

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of $5,000~{\rm ft}^3/{\rm s}$ and maximum (*):

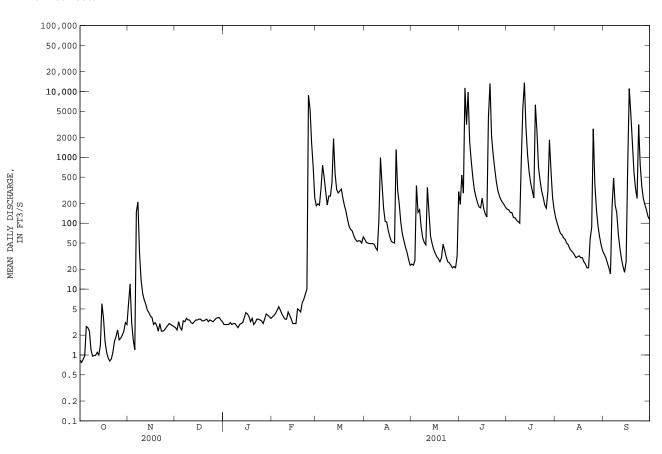
Gage height

Date	Ti	me	(ft ³ /s)	Ga	(ft)		Date	Tim	е	(ft ³ /s)		(ft)
Feb 24 Jun 4 Jun 6 Jun 20 Jul 11 Jul 12	17 09 04 02 15	00 00 00 00	14,200 16,300 15,400 *21,200 10,100 19,200		26.48 27.60 26.76 *29.22 20.22 28.60		Jul 19 Aug 25 Sep 17 Sep 18 Sep 23	150 070 040 170 110	10 10 10	10,700 5,430 15,100 7,600 5,890	1 2 1	0.96 4.72 6.40 7.40 5.33
		DISCHA	ARGE, CUBIC	FEET F	PER SECOND, DAIL	WATER YE Y MEAN VA		2000 TC	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.84 .77 .86 .97 2.7	6.0 12 3.1 1.7 1.2	2.6 2.4 3.2 2.6 2.4	e2.9 e2.9 e2.9 e2.9 e3.1	e3.8 e4.0 e4.3 e4.8 e5.4	e184 e197 188 336 757	57 51 50 49 49	24 23 27 372 146	193 536 286 11300 3140	163 160 145 145 122	120 99 83 70 67	34 30 25 21 17
6 7 8 9 10	2.6 2.3 1.2 .96 .98	148 210 36 14 8.7	3.3 3.2 3.6 3.4 e3.4	e2.9 e3.0 e3.0 e2.8 e2.6	e4.8 e4.2 e3.8 e3.5 e3.5	502 302 189 259 258	49 48 42 39 111	160 87 60 51 47	9770 1740 889 503 321	121 111 106 100 887	60 57 50 47 41	175 483 188 145 69
11 12 13 14 15	.99 1.1 1.0 1.4 6.0	6.9 5.9 4.8 4.4 3.9	e3.1 e3.0 e3.2 e3.4 e3.4	e2.9 e3.0 e3.1 e3.7 e4.4	e4.5 e4.0 e3.5 e3.0 e3.0	408 1920 570 325 288	985 391 169 107 104	350 146 64 49 40	252 205 177 171 239	5600 13500 2780 1100 602	38 36 33 30 31	42 29 22 18 26
16 17 18 19 20	3.6 1.6 1.1 .90	3.7 2.9 3.1 2.8 2.3	e3.5 e3.5 e3.3 e3.4	e4.2 e3.8 e3.2 e3.6 e2.9	e3.0 e5.0 e4.8 e4.5 e6.2	308 330 238 184 150	77 62 53 51 50	35 31 29 26 30	165 138 124 4020 13200	407 313 241 6270 2510	32 30 30 26 24	709 11000 4520 1670 599
21 22 23 24 25	.87 1.1 1.6 1.9 2.4	3.0 2.3 2.3 2.4 2.6	e3.5 e3.2 e3.4 e3.3 e3.2	e3.1 3.5 3.5 3.4 3.3	e7.0 e8.4 e10 e8740 e5330	113 89 80 76 64	1310 316 196 103 69	48 39 31 26 25	2090 1120 679 435 314	708 445 311 247 189	21 21 57 87 2710	338 237 3150 767 366
26 27 28 29 30 31	1.7 1.8 2.0 2.3 3.1 2.9	2.8 3.0 2.9 2.8 2.7	e3.4 e3.6 e3.7 e3.7 e3.4 e3.2	e3.0 3.5 4.2 e4.0 e3.8 e3.6	1660 e712 e244 	57 53 54 54 50 62	54 43 36 28 23	23 21 22 21 32 302	260 226 207 191 174	169 304 1840 608 244 160	405 165 92 63 47 38	235 192 158 126 113
MEAN MAX MIN AC-FT	1.75 6.0 .77 108	16.9 210 1.2 1010	3.25 3.7 2.4 200	3.31 4.4 2.6 204	600 8740 3.0 33310	279 1920 50 17150	159 1310 23 9470	77.0 372 21 4730	1769 13200 124 105300	1310 13500 100 80550	152 2710 21 9340	850 11000 17 50590

06890100 DELAWARE RIVER NEAR MUSCOTAH, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	181 1921 1974 1.57 1989	181 1240 1999 4.68 1977	121 655 1973 3.25 2001	90.6 545 1973 3.01 1977	194 917 1973 8.35 1989	378 1703 1973 18.6 1977	425 1771 1999 8.81 1989	512 2355 1995 9.01 1989	452 2725 1984 16.5 1988	373 4103 1993 2.54 1991	167 1039 1973 .56 1991	340 2474 1977 .32 1991
SUMMARY	SUMMARY STATISTICS			2000 CALEND	AR YEAR	F	OR 2001 WA	TER YEAR		WATER YEA	ARS 1970	- 2001
	MEAN CANNUAL M ANNUAL MI			34.4			431			284 830 38.4		1973 2000
LOWEST	DAILY ME	AN		3050	Jun 24 Sep 12		13500			23400	Sep 1	1 1973
ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE			.09	Sep 9		1.1 21200 29.22			.02 28000 30.83	Sep 1 Sep 1	.2 1989 .3 1977 .3 1977	
INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS				24960 33			.75 311900 600	Oct 1		.00 206100 454	Aug 1	.7 1989
	50 PERCENT EXCEEDS 90 PERCENT EXCEEDS			9.7 .93			36 2.6			51 5.6		



06890100 DELAWARE RIVER NEAR MUSCOTAH, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. -- Water years 1977 to August 1991, 2000 to current year.

 ${\tt REMARKS.--Unpublished \ records \ of \ intermittent \ sediment \ samples \ are \ available \ on \ the \ World \ Wide \ Web \ at \ http://ks.water.usgs.gov/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linea$ nwis. Sediment samples are collected only at selected flow conditions.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)
NOV													
07 FEB	1300	165	430	9.0	266	118							
25	1420	3900	120	1.5	1960	20600							
JUN 04	1505	14000			5330	201000	30	33	36	42	54	98	99
JUL 11	1230	10000	140	23.0	5860	158000	39	27	47	58	80	92	95
AUG	1230	10000	140	23.0	3000	130000	39	21	47	30	80	92	95
07	1220	57	450	29.5	65	10							

DATE	THIS	PAGEDIS SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	THAN .500 MM	SUSP. FALL DIAM. % FINER THAN	SUSP. FALL DIAM. FINER THAN 2.00 MM
NOV 07					
25 JUN					
04 JUL		100			
11 AUG		96	98	99	100
07					

06890898 PERRY LAKE NEAR PERRY, KS

LOCATION.--Lat 39 $^{\circ}$ 06 $^{\circ}$ 52 $^{\circ}$, long 95 $^{\circ}$ 25 $^{\circ}$ 33 $^{\circ}$, in NE $^{1}/_{4}$ NW $^{1}/_{4}$ sec.9, T.11 S., R.18 E., Jefferson County, Hydrologic Unit 10270103, in control tower near center of dam on Delaware River, 4.5 mi northwest of Perry, and at mile 5.8.

DRAINAGE AREA. -- 1,117 mi².

PERIOD OF RECORD.--March 1969 to current year. Prior to October 1971, published as "Perry Reservoir."

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers).

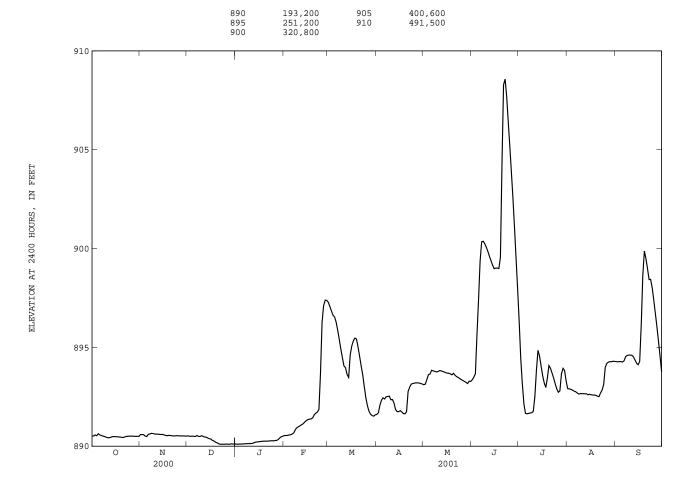
REMARKS.--Reservoir is formed by compacted earthfill dam. Some temporary storage occurred in Feb. 1969; dam was closed Mar. 21, 1969. Conservation pool elevation was first reached on June 3, 1970. Total capacity, 778,700 acre-ft, consisting of the following: Conservation pool, 225,000 acre-ft below elevation 891.5 ft; flood-control pool, 517,500 acre-ft between elevations 891.5 ft and 920.6 ft; and uncontrolled storage, 36,160 acre-ft between elevations 920.6 ft and 922.0 ft. Reservoir is used to store water for flood control, irrigation, and recreation. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 920.94 ft July 26, 1993, contents, 734,000 acre-ft; minimum elevation since conservation pool was first reached, 886.37 ft May 18, 1989, contents, 169,600 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 908.65 ft June 22, contents, 465,900 acre-ft; minimum elevation, 890.09 ft Dec. 22, contents, 194,100 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet) (Computed by U.S. Army Corps of Engineers on basis of resurvey made in 1989)

Note.--Effective date of new capacity table Oct. 1, 1990.



06890898 PERRY LAKE NEAR PERRY, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	890.51 890.52 890.57 890.53 890.63	890.59 890.59 890.58 890.51 890.49	890.52 890.51 890.50 890.51 890.50	890.11 890.10 890.11 890.11	890.54 890.54 890.55 890.57 890.58	897.28 897.07 896.84 896.63 896.54	891.61 891.69 892.08 892.33 892.45	893.11 893.14 893.38 893.62 893.65	893.36 893.49 893.67 895.64 897.38	896.28 894.41 893.16 892.14 891.66	892.91 892.90 892.88 892.84 892.79	894.28 894.27 894.28 894.28 894.26
6 7 8 9 10	890.57 890.54 890.51 890.49 890.46	890.60 890.62 890.65 890.64 890.62	890.49 890.54 890.50 890.49 890.53	890.12 890.12 890.13 890.13	890.62 890.68 890.85 890.94 890.99	896.28 895.87 895.40 894.92 894.48	892.39 892.50 892.52 892.53 892.35	893.84 893.81 893.79 893.76 893.77	899.35 900.34 900.37 900.24 900.06	891.64 891.66 891.68 891.69 891.77	892.76 892.70 892.64 892.66 892.66	894.32 894.53 894.59 894.61 894.61
11 12 13 14 15	890.43 890.43 890.45 890.48 890.49	890.61 890.61 890.60 890.59 890.60	890.50 890.46 890.46 890.41 890.38	890.14 890.15 890.20 890.21 890.22	891.04 891.09 891.14 891.23 891.30	894.06 893.97 893.63 893.48 894.62	892.36 892.18 891.85 891.75 891.75	893.82 893.82 893.78 893.76 893.72	899.85 899.60 899.38 899.16 898.98	892.50 893.84 894.85 894.56 894.05	892.66 892.65 892.65 892.60 892.63	894.60 894.52 894.36 894.20 894.12
16 17 18 19 20	890.48 890.48 890.47 890.46 890.45	890.57 890.55 890.53 890.55 890.54	890.36 890.29 890.26 890.20 890.17	890.23 890.24 890.25 890.26 890.25	891.35 891.37 891.38 891.43	895.07 895.33 895.47 895.42 895.02	891.80 891.73 891.65 891.64 891.75	893.70 893.69 893.66 893.61 893.69	899.01 899.01 898.99 899.56 904.34	893.56 893.20 892.97 893.45 894.08	892.60 892.59 892.59 892.57 892.53	894.29 896.15 898.67 899.87 899.49
21 22 23 24 25	890.44 890.47 890.50 890.50	890.53 890.52 890.52 890.53 890.53	890.12 890.10 890.10 890.10	890.26 890.26 890.27 890.28 890.27	891.67 891.73 891.86 893.67 896.26	894.55 894.06 893.61 893.01 892.45	892.77 892.99 893.14 893.17 893.19	893.59 893.52 893.48 893.42	908.29 908.57 907.68 906.40 905.17	893.94 893.70 893.45 893.16 892.90	892.51 892.70 892.84 893.13 894.00	898.98 898.43 898.44 898.01 897.39
26 27 28 29 30 31	890.51 890.51 890.50 890.50 890.50	890.52 890.52 890.52 890.52 890.51	890.11 890.10 890.10 890.12 890.11	890.29 890.29 890.34 890.42 890.48	897.11 897.39 897.38 	892.05 891.77 891.62 891.55 891.52 891.59	893.21 893.20 893.20 893.17 893.15	893.32 893.28 893.23 893.17 893.29 893.28	903.87 902.54 901.05 899.50 897.94	892.73 892.80 893.66 893.94 893.83 893.29	894.19 894.25 894.28 894.27 894.30 894.29	896.72 896.05 895.32 894.56 893.77
MEAN MAX MIN (+) (#)	890.50 890.63 890.43 198,500 -200	890.56 890.65 890.49 198,600 +100	890.31 890.54 890.10 194,300 -4,300	890.23 890.51 890.10 198,600 +4,300	892.03 897.39 890.54 282,900 +84,300	894.36 897.28 891.52 210,500 -72,400	892.40 893.21 891.61 228,400 +17,900	893.55 893.84 893.11 230,000 +1,600	900.43 908.57 893.36 290,800 +60,800	893.24 896.28 891.64 230,100 -60,700	893.05 894.30 892.51 242,200 +12,100	895.73 899.87 893.77 235,900 -6,300

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

06890900 DELAWARE RIVER BELOW PERRY DAM, KS

LOCATION.--Lat $39^{\circ}06^{\circ}51^{\circ}$, long $95^{\circ}25^{\circ}33^{\circ}$, in NE $^{1}/_{4}$ NW $^{1}/_{4}$ sec.9, T.11 S., R.18 E., Jefferson County, Hydrologic Unit 10270103, at outlet structure of Perry Dam, 4.5 mi northwest of Perry, and at mile 5.8.

DRAINAGE AREA. -- 1,117 mi².

PERIOD OF RECORD. -- March 1969 to current year.

REVISED RECORDS. -- WDR KS-83-1: 1982.

GAGE.--Water-stage recorders for reservoir elevations and gated outflow structure.

REMARKS.--Records poor. Flow completely regulated since 1969 by Perry Lake (station 06890898). Discharge computed from relation between discharge, head, and gate openings. Satellite telemeter at station.

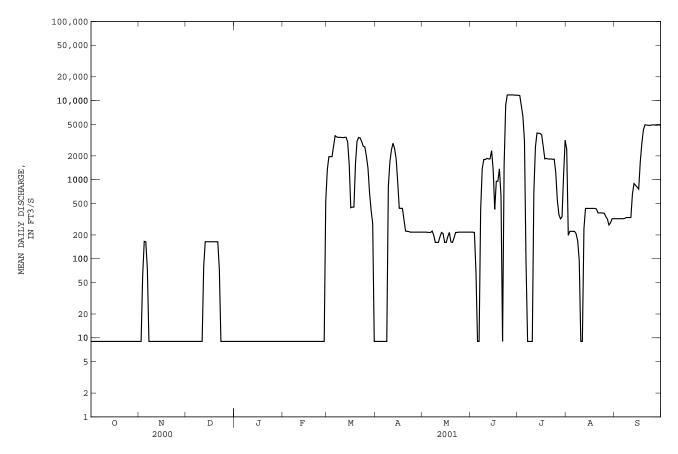
COOPERATION. -- Reservoir elevation-discharge ratings for reservoir outflow gates and gate operation logs furnished by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DATLY MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP 9.0 1330 217 217 11700 2430 9.0 2 9 0 9.0 9 0 9.0 9.0 1950 9.0 217 217 11600 198 321 9.0 9.0 9.0 1960 9.0 217 215 321 3 61 9.0 8610 222 9.0 9.0 9.0 9.0 1950 9.0 216 69 6290 222 321 166 5 9.0 164 9.0 9.0 9.0 2650 9.0 215 9.0 3090 222 321 6 9.0 74 9.0 9.0 9.0 3600 9.0 215 9.0 90 222 321 7 9.0 412 9.0 9.0 9.0 9.0 9.0 3470 9.0 224 207 323 9.0 8 9.0 9.0 9.0 9.0 9.0 3420 9.0 199 1370 169 332 9.0 9.0 9.0 9.0 9.0 3440 818 161 1800 9.0 332 10 9.0 9.0 9.0 9.0 9.0 3420 1680 161 1800 9.0 9.0 332 11 12 9 0 9 0 9.0 9 0 9 0 3400 2390 161 1860 692 9.0 332 239 9.0 9.0 80 9.0 9.0 3430 2890 190 1830 2580 660 9.0 13 9.0 164 9.0 9.0 3440 2470 215 1830 3900 433 894 9.0 14 9 0 164 9.0 9 0 2990 1830 208 2330 3860 433 848 9.0 15 1560 161 1330 9.0 164 9.0 928 3840 433 806 16 9 0 9.0 164 9 0 9 0 442 434 161 420 3680 433 759 9.0 17 9.0 450 956 164 9.0 434 190 2620 433 1660 9.0 9.0 9.0 450 434 215 956 2870 18 164 9.0 19 9.0 9.0 164 9.0 9 0 1590 311 163 1370 1860 433 4260 9.0 9.0 20 9.0 3070 224 1830 4940 164 9.0 161 623 426 21 9 0 9 0 164 9 0 9 0 3420 222 184 9.0 1820 380 4900 22 9.0 9.0 9.0 3370 221 215 1520 1830 74 9.0 380 4880 23 9.0 9.0 9.0 9.0 9.0 3020 217 215 8740 1810 4850 24 9 0 9 0 9 0 9 0 9 0 2640 217 217 11800 1820 379 4900 9.0 9.0 217 217 25 9.0 2590 11800 1230 376 9.0 9.0 4940 26 9 0 9 0 9 0 9 0 9 0 1970 217 217 11800 553 341 4930 27 9.0 9.0 9.0 9.0 1400 217 217 317 9.0 11800 363 4890 28 9.0 9.0 9.0 9.0 532 680 217 217 11800 320 267 4910 ___ 29 9 0 9 0 9 0 9 0 410 217 217 11700 338 285 4930 30 9.0 9.0 9.0 217 11700 4890 31 9.0 9.0 9.0 ---9.0 217 3150 321 MEAN 9.00 23.3 58.4 9.00 27.7 2187 570 201 3743 2661 369 2343 9.0 MAX 9.0 166 164 532 3600 2890 224 11800 11700 2430 4940 9.0 9.0 9.0 9.0 9.0 MIN 9.0 9.0 161 9.0 9.0 321 3590 134500 33910 12330 222700 163600 22710 139400

06890900 DELAWARE RIVER BELOW PERRY DAM, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEE	3	MAR	APR	MAX	. JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	675 4827 1974 9.00 2001	595 4160 1974 .000 1984	509 2618 1993 .000 1984	242 2446 1973 .000 1984	458 2314 1973 15.4 1970	<u>.</u>	674 3260 1973 16.4 1970	1118 4380 1973 22.3 1989	1066 4929 1999 22.0 1989	7077 1995 22.0	922 4649 1984 24.1 1989	647 7610 1993 22.6 1989	524 5159 1977 9.00 2000
SUMMARY	STATIST:	ICS	FOR 2	2000 CALEN	DAR YE	AR	F	OR 2001	WATER YE	CAR	WATER	YEARS 1970	0 - 2001
	MEAN CANNUAL I ANNUAL MI			139				1018			737 1933 74.	5	1993 1989
HIGHEST	DAILY M	EAN		3000	Jul			11800	Jun	24	14000	May	31 1995
ANNUAL MAXIMUM INSTANT ANNUAL 10 PERC	DAILY MEA SEVEN-DAY 1 PEAK FLO CANEOUS LO RUNOFF (A CENT EXCENT CENT EXCENT	Y MINIMUM OW FLOW AC-FT) EDS		8.3 9.0 100700 164 35	Apr Aug			9. 9. 11900 9. 736800 3410 198	0 Oct Jun		15100	May	1 1973 12 1973 31 1995 ny years
	CENT EXCE			9.0				9.	0		25		



06891000 KANSAS RIVER AT LECOMPTON, KS

LOCATION.--Lat $39^{\circ}03^{\circ}07^{\circ}$, long $95^{\circ}23^{\circ}15^{\circ}$, in SE $^{1}/_{4}$ SW $^{1}/_{4}$ sec.35, T.11 S., R.18 E., Jefferson County, Hydrologic Unit 10270104, on left bank at upstream side of county highway bridge at Lecompton, 0.8 mi downstream from Delaware River, and at mile 63.8.

DRAINAGE AREA. -- 58,460 mi², approximately, of which a large area is noncontributing.

PERIOD OF RECORD.--January to November 1896 and April to July 1906 (gage heights only), March 1936 to current year. Records for April 1899 to December 1905 published in WSP 37, 39, 50, 52, 66, 75, 84, 99, 131, 172, and 796-B have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 876: 1937. WSP 1176: 1903(M). WSP 1440: 1948-49(P). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 821.84 ft above sea level. Prior to July 30, 1952, nonrecording gage, and July 30, 1952, to Apr. 29, 1970, recording gage, at site 0.15 mi upstream at same datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by lakes and reservoirs in Colorado, Nebraska, and Kansas, and by numerous diversions upstream from station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since 1844, 30.23 ft July 13, 1951. Flood of May 31, 1903 (second highest since 1844), reached a stage of 27.9 ft, from floodmark.

DAY FEB SEP OCT NOV DEC JAN MAR MAY AUG e1000 e980 e930 e960 e1200 7 e1500 8320 2710 e1700 e1600 e6210 e1340 e5240 e1290 e4280 e990 e1260 e930 e1370 e1500 13300 7470 e910 e1000 e1750 e1070 e960 e960 e900 e930 e9210 e940 e910 e9860 e9710 e930 e930 e9640 e10300 e10300 e930 e970 e9930 e1020 e9850 e10200 e1070

MEAN

MAX

MTN

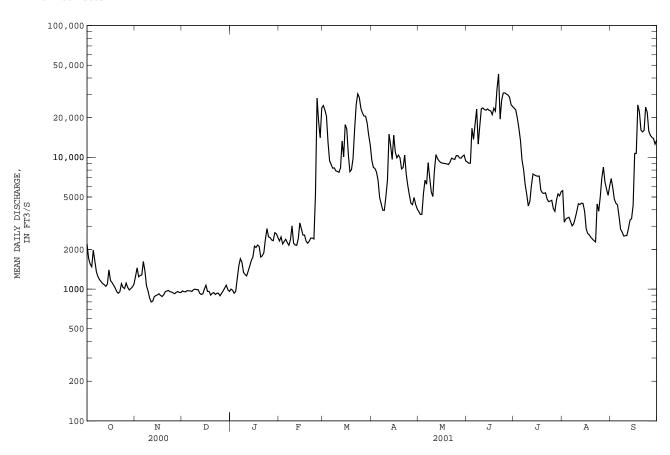
AC-FT

e990

06891000 KANSAS RIVER AT LECOMPTON, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	5788 49500 1974 349 1957	4377 41790 1974 417 1957	3640 20690 1974 377 1957	2797 13740 1974 329 1957	4558 19640 1949 496 1957	7254 31540 1973 564 1967	9267 39070 1987 774 1956	10950 40820 1995 784 1956	14700 81560 1951 1120 1989	12330 116500 1951 1190 1940	7069 65080 1993 602 1955	6419 36200 1951 448 1956
SUMMARY	STATIST	ICS	FOR	2000 CALE	ENDAR YEAR		FOR 2001	WATER YEAR		WATER Y	ZEARS 193	7 - 2001
	MEAN ANNUAL ANNUAL M			2770			7171			7437 28330 1275		1993 1956
HIGHEST	DAILY M	EAN		13400	Jul 5		42900	Jun 21		472000		13 1951
	DAILY ME			798	Nov 11		798	Nov 11		185		13 1956
		MUMINIM Y		866	Nov 10		866	Nov 10		200	Oct	
	I PEAK FL						54200	Jun 21		483000		13 1951
	I PEAK ST						14.			30.2		13 1951
	ANEOUS L			0011000			783	Nov 11		185	Oct	13 1956
	RUNOFF (- ,		2011000 5480			5192000 20800			5388000 17900		
	ENT EXCE			2340			4330			3470		
	ENT EXCE			960			959			985		



06891478 CLINTON LAKE NEAR LAWRENCE, KS

LOCATION.--Lat $38^\circ55^\circ51^\circ$, long $95^\circ20^\circ02^\circ$, in NW $^1/_4$ SW $^1/_4$ Sec.8, T.13 S., R.19 E., Douglas County, Hydrologic Unit 10270104, in control tower of Clinton Dam on Wakarusa River, 4.0 mi west of Lawrence, and at mile 22.3.

DRAINAGE AREA. -- 367 mi².

PERIOD OF RECORD. -- December 1977 to current year.

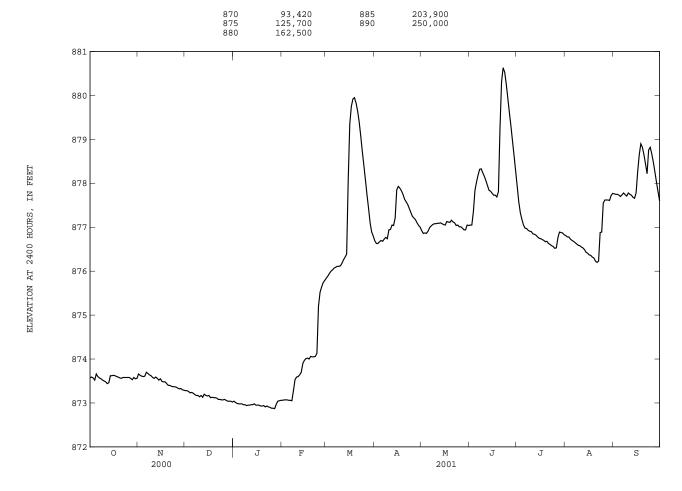
GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Nov. 30, 1977. Conservation pool elevation was first reached Apr. 3, 1980. Total capacity, 683,400 acre-ft, consisting of the following: Dead storage, 90 acre-ft below elevation 825.0 ft; conservation pool, 129,100 acre-ft between elevations 825.0 ft and 875.5 ft; flood-control pool, 268,400 acre-ft between elevations 875.5 ft and 903.4 ft; and surcharge pool, 285,800 acre-ft between elevations 903.4 ft and 921.4 ft. Reservoir is used for flood control, conservation, and recreation. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 892.48 ft May 29, 1995, contents, 274,500 acre-ft; minimum elevation since conservation pool first reached, 871.60 ft Aug. 18, 1989, contents, 103,300 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 880.66 ft June 23, contents, 167,700 acre-ft; minimum elevation, 872.85 ft Jan. 26, contents, 111,500 acre-ft.

Capacity table (elevation, in feet, and total contents, in acre-feet) (Computed by U.S. Army Corps of Engineers in 1965)



06891478 CLINTON LAKE NEAR LAWRENCE, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	873.57	873.66	873.28	873.04	873.06	875.84	876.69	876.92	877.05	877.93	876.81	877.76
2	873.59	873.63	873.28	873.01	873.07	875.89	876.63	876.86	877.05	877.58	876.78	877.75
3	873.57	873.61	873.26	872.99	873.07	875.95	876.63	876.87	877.36	877.33	876.78	877.75
4	873.52	873.60	873.23	872.98	873.07	876.00	876.67	876.86	877.84	877.18	876.73	877.73
5	873.66	873.61	873.24	872.98	873.06	876.03	876.70	876.91	878.03	877.05	876.70	877.70
6 7 8 9 10	873.60 873.57 873.55 873.52 873.50	873.70 873.67 873.64 873.62 873.58	873.22 873.19 873.17 873.17 873.14	872.98 872.96 872.96 872.94 872.95	873.06 873.05 873.28 873.53 873.59	876.07 876.09 876.11 876.11	876.68 876.73 876.77 876.74 876.94	876.99 877.03 877.06 877.08 877.08	878.19 878.32 878.33 878.24 878.16	876.98 876.97 876.93 876.91 876.90	876.68 876.65 876.62 876.59 876.58	877.74 877.78 877.74 877.71 877.78
11	873.48	873.56	873.17	872.95	873.60	876.18	876.95	877.09	878.06	876.85	876.55	877.75
12	873.44	873.59	873.13	872.96	873.64	876.26	877.05	877.09	877.95	876.84	876.53	877.73
13	873.46	873.56	873.20	872.96	873.70	876.32	877.04	877.10	877.84	876.82	876.49	877.68
14	873.62	873.52	873.17	872.98	873.90	876.39	877.21	877.08	877.82	876.78	876.43	877.66
15	873.62	873.55	873.16	872.95	873.97	878.07	877.85	877.06	877.77	876.75	876.41	877.79
16	873.63	873.49	873.17	872.95	874.01	879.35	877.93	877.05	877.73	876.74	876.37	878.27
17	873.62	873.48	873.12	872.95	874.02	879.75	877.89	877.13	877.73	876.72	876.36	878.65
18	873.60	873.48	873.13	872.93	874.00	879.92	877.83	877.12	877.69	876.70	876.32	878.90
19	873.59	873.44	873.12	872.93	874.06	879.95	877.75	877.11	877.81	876.67	876.30	878.82
20	873.57	873.40	873.12	872.94	874.05	879.83	877.64	877.16	879.25	876.68	876.23	878.65
21 22 23 24 25	873.56 873.58 873.58 873.58 873.58	873.40 873.38 873.37 873.37	873.11 873.08 873.08 873.07 873.07	872.91 872.93 872.91 872.90 872.88	874.05 874.06 874.13 875.20 875.52	879.65 879.40 879.08 878.73 878.41	877.58 877.52 877.43 877.34 877.25	877.12 877.10 877.04 877.05 877.01	880.31 880.63 880.53 880.26 879.94	876.63 876.61 876.58 876.56 876.52	876.20 876.23 876.88 876.89 877.55	878.44 878.22 878.76 878.82 878.67
26 27 28 29 30 31	873.58 873.56 873.53 873.58 873.55 873.56	873.34 873.32 873.33 873.30 873.29	873.08 873.06 873.04 873.04 873.04 873.02	872.88 872.87 872.97 873.04 873.05 873.06	875.64 875.74 875.79 	878.08 877.74 877.43 877.10 876.89 876.80	877.21 877.17 877.10 877.04 877.00	877.01 876.98 876.94 876.94 877.05 877.04	879.61 879.30 878.96 878.63 878.28	876.53 876.76 876.89 876.88 876.87 876.83	877.62 877.62 877.62 877.61 877.72 877.77	878.48 878.26 878.03 877.81 877.60
MEAN	873.57	873.49	873.14	872.96	873.96	877.47	877.17	877.03	878.49	876.87	876.79	878.08
MAX	873.66	873.70	873.28	873.06	875.79	879.95	877.93	877.16	880.63	877.93	877.77	878.90
MIN	873.44	873.29	873.02	872.87	873.05	875.84	876.63	876.86	877.05	876.52	876.20	877.60
(+)	114,900	114,100	112,400	112,600	131,200	138,400	139,900	140,200	149,300	138,600	145,500	144,300
(#)	-100	-1,800	-1,700	+200	+18,600	+7,200	+1,500	+300	+9,100	-10,700	+6,900	-1,200

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

06891500 WAKARUSA RIVER NEAR LAWRENCE, KS

LOCATION.--Lat $38^{\circ}54^{\circ}40^{\circ}$, long $95^{\circ}15^{\circ}37^{\circ}$, in NE $^{1}/_{4}$ NE $^{1}/_{4}$ NE $^{1}/_{4}$ sec.23, T.13 S., R.19 E., Douglas County, Hydrologic Unit 10270104, on left bank at upstream side of bridge on U.S. Highway 59, 4 mi south of Lawrence, and at mile 16.3.

DRAINAGE AREA.--425 $\mathrm{mi}^2,$ Dec. 1, 1972 to Sept. 30, 1980, 412 $\mathrm{mi}^2.$

PERIOD OF RECORD.--April 1929 to current year. Published as "below Clinton Dam" December 1972 to September 1980.

REVISED RECORDS.--WSP 976: 1935. WSP 1310: 1929(M), 1933(M), 1938(M), 1945-47(M), 1949-50(M). WSP 1919: 1958, 1959.

GAGE.--Water-stage recorder. Datum of gage is 799.26 ft above sea level. Prior to May 7, 1959, nonrecording gage, and May 8, 1959, to Nov. 30, 1972, water-stage recorder at present site and datum. Dec. 1, 1972, to Sept. 30, 1980, water-stage recorder at site 2.3 mi upstream at datum 3.95 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow significantly regulated since 1977 by Clinton Lake (station 06891478), 6.0 mi upstream. Satellite telemeter at station.

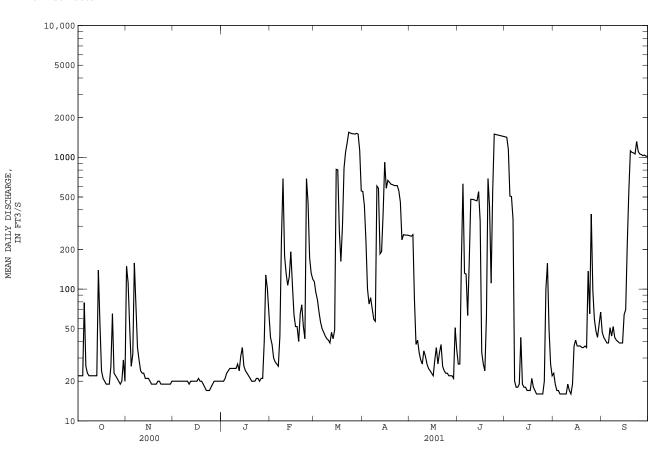
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1880, that of July 12, 1951.

		DISCHARG	E, CUBIC	C FEET PER		WATER YE Y MEAN VA		R 2000 TO	SEPTEMBE	R 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	22 22 22 22 79	149 112 52 26 32	20 20 20 20 20	e20 e20 e21 e23 e24	43 38 30 28 27	114 94 83 67 56	551 431 231 100 77	254 252 259 83 38	27 27 164 629 132	1430 1420 1150 508 504	23 19 17 17 16	47 43 41 39 39
6 7 8 9 10	26 23 22 22 22	158 75 36 29 24	20 20 20 20 20	e25 e25 25 e25 25	26 44 241 689 179	50 47 44 42 41	86 71 59 57 606	41 33 29 27 34	130 63 158 480 480	339 20 18 18 19	16 16 16 16 19	51 44 52 43 41
11 12 13 14 15	22 22 22 139 55	23 23 21 21 21	19 20 20 20 20	27 24 31 36 26	131 107 124 192 108	39 47 42 49 811	582 185 193 383 917	31 27 25 24 23	477 471 468 550 328	43 19 18 18 17	17 16 19 37 41	40 39 39 39 64
16 17 18 19 20	24 21 20 19 19	20 19 19 19	20 21 20 e20 e19	24 23 22 21 20	64 52 52 40 65	804 274 162 304 830	583 669 648 625 621	22 29 36 27 33	33 27 24 61 691	17 17 21 18 17	37 37 37 36 36	70 217 552 1120 1090
21 22 23 24 25	19 26 65 23 22	20 20 19 19	e18 e17 e17 e17 e18	20 20 21 21 20	76 52 42 688 454	1100 1290 1550 1530 1510	611 610 610 559 457	38 26 24 23 23	421 111 554 1500 1490	16 16 16 16 16	37 36 137 65 371	1080 1060 1320 1110 1060
26 27 28 29 30 31	21 20 19 20 29 20	19 19 19 19 20	e19 e20 e20 e20 e20 e20	21 21 40 128 101 65	173 132 119 	1510 1500 1520 1500 1130 556	236 259 257 257 256	22 22 22 21 51 35	1480 1470 1460 1450 1440	20 100 157 50 27 22	98 59 48 43 54 67	1050 1030 1040 1020 1020
MEAN MAX MIN AC-FT	30.0 139 19 1840	36.4 158 19 2160	19.5 21 17 1200	31.1 128 20 1910	143 689 26 7970	603 1550 39 37080	393 917 57 23380	52.7 259 21 3240	560 1500 24 33310	196 1430 16 12070	48.5 371 16 2980	483 1320 39 28760

06891500 WAKARUSA RIVER NEAR LAWRENCE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	238 2038 1986 2.66 1991	220 1953 1999 3.60 1996	163 984 1993 2.04 1979	67.7 380 1998 1.26 1996	144 682 1982 1.71 1996	298 874 1987 3.54 1996	400 1481 1983 15.1 1981	508 2324 1999 17.4 2000	533 2447 1995 23.9 1989	329 725 1984 11.5 1994	137 1145 1993 16.3 1990	109 702 1993 3.42 1991
SUMMARY	Y STATIST	ICS	FOR 2	2000 CALEN	DAR YEAR	FC	OR 2001 W	ATER YEAR		WATER YEA	RS 1978	- 2001
LOWEST	ANNUAL M	EAN		52.6			215			263 728 20.8		1999 1989
LOWEST	DAILY ME. DAILY ME.			525 4.0 4.1	Mar 29 Jan 31 Jan 29		1550 16 16	Mar 23 Jul 21 Aug 3		6340 .24 .59	Oct Nov	5 1998 3 1983 30 1983
MAXIMUN MAXIMUN	M PEAK FLO M PEAK ST	OW AGE		1.1	our 25		1620 13.3	Apr 10 2 Apr 10		24200 31.59	Jul Jul	12 1951 12 1951
ANNUAL	FANEOUS LO RUNOFF () CENT EXCE	AC-FT)		38160 149			12 155900 736	Dec 19		.00 190200 891	som	e years
	CENT EXCE			20 4.7			37 19			29 5.9		



06892000 STRANGER CREEK NEAR TONGANOXIE, KS

LOCATION.--Lat $39^{\circ}06^{\circ}59^{\circ}$, long $95^{\circ}00^{\circ}39^{\circ}$, in NE $^{1}/_{4}$ NE $^{1}/_{4}$ NE $^{1}/_{4}$ sec.7, T.11 S., R.22 E., Leavenworth County, Hydrologic Unit 10270104, on left bank at downstream side of bridge on U.S. Highway 40, 2.0 mi upstream from Tonganoxie Creek, 4.0 mi east of Tonganoxie, and at mile 18.1.

DRAINAGE AREA.--406 mi².

PERIOD OF RECORD. -- April 1929 to current year.

REVISED RECORDS.--WSP 1440: 1929, 1936(M), 1940, 1942(M), 1949. WSP 1710: 1951.

GAGE.--Water-stage recorder. Datum of gage is 800.95 ft above sea level (levels by U.S. Army Corps of Engineers). Apr. 30, 1929, to June 1, 1939, nonrecording gage and June 2, 1939, to June 1, 1960, water-stage recorder, at present site and datum. June 1, 1960, to May 16, 1997, water-stage recorder 1.3 mi upstream of present site, at datum 4.00 ft higher. May 28, 1998 moved gage back to permanent location on U.S. Highway 40.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

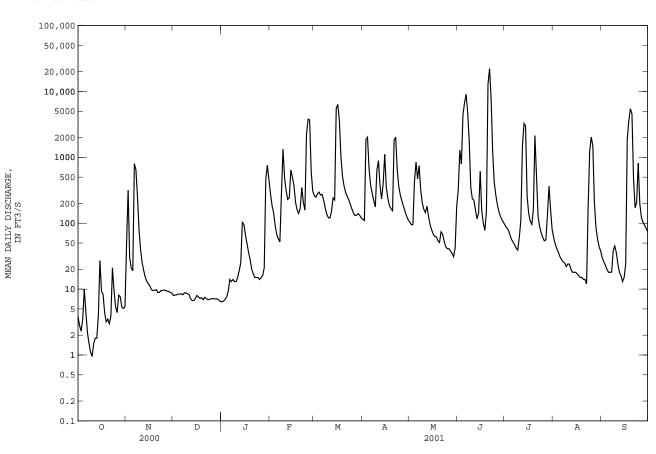
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,600 ft³/s and maximum (*):

Date	Ti	me	Discharge (ft ³ /s)	e Gag	e height (ft)		Date	Tim	ie	Discharge (ft ³ /s)		height (ft)
Feb 26 Mar 16 Apr 3 Apr 21 Jun 6	05 17 23	00 00 00 00 00	4,230 6,940 3,870 3,390 11,900		20.11 23.72 19.08 17.66 24.97		Jun 21 Jul 14 Aug 25 Sep 19	020 090 070 223)0)0	*40,000 4,030 2,630 6,540	1 1	9.81 9.42 5.31 2.52
		DISCHA	ARGE, CUBI	C FEET PE		WATER YE Y MEAN VA		R 2000 TO	SEPTEMB:	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	3.8 2.8 2.3 3.5	46 316 30 21 19	8.0 8.1 8.2 8.4 8.4	e6.4 e6.6 e7.0 e7.6 9.3	279 185 144 92 67	262 248 279 296 268	115 110 1860 2020 669	104 95 95 425 846	320 1280 793 4390 6720	92 85 79 67 57	60 48 41 36 31	30 26 23 20 18
6 7 8 9 10	4.5 2.2 1.5 1.1	798 648 248 79 39	8.5 8.2 8.8 8.7 8.5	14 13 14 13	58 52 291 1330 486	273 223 169 137 121	373 285 219 177 635	472 747 319 203 162	9040 4910 1760 350 235	52 47 42 39 61	28 26 25 22 24	18 18 38 45 36
11 12 13 14 15	1.5 1.8 1.8 4.0 27	25 19 15 13	8.2 7.1 6.7 6.7 7.2	15 19 25 103 96	310 230 243 641 499	120 152 242 226 5450	887 369 235 397 1110	145 181 127 95 79	224 158 116 144 612	111 1480 3270 2990 258	24 20 18 18	24 18 16 13 15
16 17 18 19 20	9.3 8.3 4.4 3.2 3.5	11 9.8 9.5 9.6 9.8	8.0 7.6 7.2 7.4 6.9	66 49 36 28 e20	370 209 160 141 169	6360 3700 1040 518 368	353 240 185 166 155	68 63 62 54 51	156 100 78 152 e12900	140 108 96 161 2140	17 16 15 15	24 1890 3610 5460 4580
21 22 23 24 25	3.0 3.9 21 9.5 5.4	8.9 8.9 9.5 9.5	7.5 7.2 6.9 7.0 7.1	17 15 15 15 e14	346 207 158 2200 3790	294 256 228 194 165	1820 2030 650 358 264	74 68 53 44 41	e22200 e7740 e1190 416 268	519 127 89 71 61	14 12 174 1250 2020	480 172 206 813 201
26 27 28 29 30 31	4.4 8.1 7.6 5.3 5.1 5.4	9.5 9.3 9.2 8.9 8.7	7.2 e7.1 e7.1 e7.1 e6.8 e6.5	15 16 21 470 756 456	3700 617 307 	144 131 132 140 132 120	216 181 150 128 113	41 38 35 31 42 181	190 149 126 112 102	54 56 135 365 159 80	1500 205 87 58 44 38	123 104 94 84 75
MEAN MAX MIN MED AC-FT	5.68 27 .95 4.0 349	82.3 798 8.7 12 4900	7.56 8.8 6.5 7.2 465	76.5 756 6.4 15 4700	617 3790 52 261 34280	722 6360 120 228 44410	549 2030 110 274 32670	163 846 31 79 10000	2564 22200 78 294 152600	422 3270 39 92 25970	191 2020 12 26 11740	609 5460 13 42 36250

06892000 STRANGER CREEK NEAR TONGANOXIE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	202 2060 1986 .000 1954	179 1734 1932 .013 1957	113 942 1945 .12 1957	92.4 579 1973 .10 1957	177 1071 1962 .54 1957	275 2013 1973 2.85 1954	361 1692 1999 4.30 1935	392 1868 1995 9.20 1989	510 2915 1967 3.61 1988	301 2697 1993 .58 1934	146 1151 1968 .000 1934	258 2411 1977 .000 1956
SUMMARY	STATIST	ICS	FOR 2	2000 CALEND	AR YEAR	F	OR 2001 W	ATER YEAR		WATER YEA	ARS 1930	- 2001
	MEAN FANNUAL M ANNUAL MI			69.7			495			250 802 8.20		1993 1934
	DAILY ME			2720 .20	Jun 20 Sep 19		22200 .95	Jun 21 5 Oct 10		22200	Jul	1 2001 4 1934
MAXIMUN	PEAK FLO			.27	Sep 16		1.5	Oct 7 Jun 21		40000	Jun 2	1 1934
INSTANT	1 PEAK STA TANEOUS LO RUNOFF (A	OW FLOW		50600			29.81 .83 358300			29.81 .00 181300		1 2001 years
10 PERC 50 PERC	CENT EXCE	EDS EDS		89 16			826 74			438 40		
90 PERC	CENT EXCE	TDS		1.8			7.1			2.0		



06892350 KANSAS RIVER AT DESOTO, KS

LOCATION.--Lat $38^{\circ}59^{\circ}00^{\circ}$, long $94^{\circ}57^{\circ}52^{\circ}$, in SE $^{1}/_{4}$ NE $^{1}/_{4}$ sec.27, T.12 S., R.22 E., Leavenworth County, Hydrologic Unit 10270104, on left bank at downstream side of bridge on county highway, north edge of DeSoto, 0.4 mi upstream from Kill Creek, and at mile 31.0.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--59,756 mi^2 , of which a large area is noncontributing.

PERIOD OF RECORD.--July 1917 to current year. Monthly discharge only for some periods published in WSP 1310. Prior to October 1973, published as "at Bonner Springs."

REVISED RECORDS. -- WSP 806: Drainage area.

AC-FT

GAGE.--Water-stage recorder. Datum of gage is 753.87 ft above sea level. July 9, 1917, to Apr. 23, 1934, nonrecording gage; Apr. 24, 1934, to Nov. 25, 1960, water-stage recorder at site 9.7 mi downstream at datum 11.81 ft lower; Nov. 26, 1960, to Feb. 9, 1961, nonrecording gage; Feb. 10, 1961, to Sept. 30, 1971, water-stage recorder at site 10.2 mi downstream at datum 17.81 ft lower; and Oct. 1, 1971, to Sept. 30, 1973, at site 10.2 mi downstream at datum 22.81 ft lower. Lowered gage datum 5.0 ft Sept. 30, 1996, to 753.87 ft.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by lakes and reservoirs in Colorado, Nebraska, and Kansas, and by numerous diversions upstream from station. Diurnal fluctuations caused by hydroelectric plant 20.8 mi upstream; since storage capacity is small, daily flows are not affected appreciably. Satellite telemeter at station.

DISCHARGE, CURIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

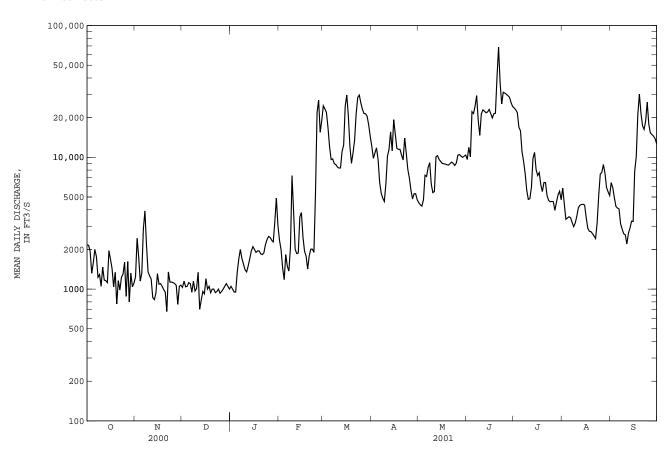
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1844, that of July 13, 1951.

DAILY MEAN VALUES DAY FEB OCT NOV DEC JAN MAR APR MAY JUN JUL AUG SEP e1050 e1000 e950 e1320 e950 e1580 e1350 7 a1700 e1760 e2000 e1230 e1700 e1290 e1550 e1050 e1400 e1350 e1500 e1700 e960 e1950 e920 e2100 e1200 e2000 e1000 e1900 e1950 e1050 e940 e1950 e1000 e1000 e940 e960 e1000 e930 e960 e1000 e1050 e1100 e1050 ___ e1000 ---MEAN MAX MIN

06892350 KANSAS RIVER AT DESOTO, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	5760 51630 1974 365 1957	4658 42320 1974 504 1957	3650 21940 1974 465 1957	2915 15990 1973 364 1957	4552 20800 1949 635 1957	7197 36560 1973 632 1967	9718 43570 1973 845 1956	11190 43270 1993 953 1989	15150 78870 1951 1188 1989	11800 133200 1951 1106 1936	7019 66680 1993 455 1934	6658 44660 1951 525 1956
SUMMARY	STATIST	ICS	FOR	2000 CALE	ENDAR YEAR		FOR 2001	WATER YEA	AR.	WATER	YEARS 191	8 - 2001
	MEAN CANNUAL I ANNUAL M			2995			7823			7528 30570 1326		1993 1956
HIGHEST	DAILY M	EAN		14700	Jun 21		68500	Jun 2		486000		14 1951
	DAILY ME			675	Nov 21		675	Nov 2		160		11 1956
		Y MINIMUM		951	Dec 12		951	Dec 1		195	Oct	
	1 PEAK FL 1 PEAK ST						80800 20.	Jun 2 98 Jun 2		510000 37.		13 1951 13 1951
	TANEOUS L						492	Nov 2		160		11 1956
ANNUAL 10 PERC 50 PERC	RUNOFF (. CENT EXCE CENT EXCE	AC-FT) EDS EDS		2174000 5720 2380 1050			5664000 21600 4560 1050			5454000 18000 3420 1100		



06892350 KANSAS RIVER AT DESOTO, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. -- Water years 1975-91, 2000 to current year.

PERIOD OF DAILY RECORD. --

SPECIFIC CONDUCTANCE: October 1974 to September 1981, June 1999 to current year.

pH: June 1999 to current year.
WATER TEMPERATURE: October 1974 to September 1981, June 1999 to current year.

DISSOLVED OXYGEN: June 1999 to current year. TURBIDITY: June 1999 to current year.

INSTRUMENTATION. -- Multiparameter water-quality monitor.

REMARKS.--Records good. Interruptions in record are due to ice conditions or malfunction of the recording instrument or sensors. Instruments used to measure trubidity conform to ISO 7027 standards.

EXTREMES FOR PERIOD OF RECORD .--

SPECIFIC CONDUCTANCE: Maximum, 1,510 microsiemens/cm, Nov. 6, 1999 minimum, 193 microsiemens/cm, June 30, 1999. pH: Maximum, 9.2 standard units, Sept. 21, 2000; minimum, 7.4 standard units, June 30, 1999. WATER TEMPERATURE: Maximum, 34.3 °C, July 14, 2000; minimum, 0.0 °C, Jan. 26, 2000. DISSOLVED OXYGEN: Maximum 21.7 mg/L, Nov. 7, 1999; minimum, 5.5 mg/L, Aug. 6, 2000. TURBIDITY: Maximum, >1,400 NTU, July 3, 1999; minimum, 3 NTU, Nov. 27, 2000.

EXTREMES FOR CURRENT YEAR . --

SPECIFIC CONDUCTANCE: Maximum, 1,250 microsiemens/cm, Nov. 15; minimum, 230 microsiemens/cm, Feb. 26.

PH: Maximum, 9.2 standard units, Aug. 18; minimum, 7.6 standard units, Nov. 6. WATER TEMPERATURE: Maximum, 34.0 °C, Aug. 5; minimum, 0.0 °C, Feb. 2. DISSOLVED OXYGEN: Maximum, 18.3 mg/L, Feb. 17; minimum, 5.9 mg/L, Aug. 24. TURBIDITY: Maximum, 1,410 ntu, Mar. 15; minimum, 3 ntu, Nov. 27.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN									
		OCTOBER	!	N	OVEMBER		D	ECEMBER			JANUARY	7
1	760	745	752	1030	980	1010	1050	1030	1040			
2	768	744	757	1000	741	836	1090	1050	1070			
3	749	710	735	955	809	897	1100	1080	1090			
4	800	720	760	955	925	941	1110	1090	1100			
5	852	773	806	972	932	958	1120	1110	1120			
6	853	760	807	956	551	823	1130	1120	1120			
7	839	698	748	668	501	568	1120	1090	1100			
8	904	733	823	725	668	705	1130	1100	1120			
9	935	889	910	766	685	711	1120	1110	1120			
10	974	935	944	869	766	827	1130	1110	1110			
11	1010	974	1000	911	869	892						
12	1030	1010	1020									
13	1060	1020	1030									
14	1050	759	979	1200								
15	774	655	718	1250	1180	1220						
16	927	774	897	1180	1150	1160						
17	910	872	887	1150	1120	1130				998	964	974
18	992	909	935	1140	1120	1130				1140	998	1060
19	993	966	979	1140	1120	1130				1140	1120	1130
20	1000	963	979	1150	1130	1140				1160	1110	1130
21	1040	1000	1030	1150	1080	1120				1170	1100	1140
22	1030	1010	1010	1180	1150	1170				1150	1120	1140
23	1010	929	970	1160	1110	1140				1150	1130	1140
24	991	893	936							1150	1120	1140
25	1030	972	1010							1120	1050	1090
26	990	955	962							1050	987	1010
27	1020	990	1010							1040	1010	1030
28	990	935	953							1030	1000	1010
29	1000	950	986	1110	1090	1100				1040	915	993
30	1000	983	993	1090	1040	1070				931	868	898
31	1020	978	996							959	916	942
MONTH	1060	655	914	1250	501	985	1130	1030	1100	1170	868	1060

06892350 KANSAS RIVER AT DESOTO, KS--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

اد	PECIFIC	CONDUCTA	(1110	(CONTENED)	CI I III 23	DEG. C/,	WAIER IEF	nt octor	2000	TO BELLEVIE	DIC ZOOI	
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	964 1050 1020 1120	912 961 	945 1010 	411 433 439 445 434	358 410 432 431 426	388 421 434 439 428	423 465 468 480 532	414 422 458 456 480	418 442 464 466 500	628 668 706 739 746	590 628 668 690 621	604 652 690 713 708
6 7 8 9 10	1100 1120 1120 698 744	1070 1060 696 415 598	1080 1070 1020 512 688	458 461 448 480 503	432 443 440 448 479	444 452 443 468 489	521 601 661 687 706	448 476 601 661 536	467 539 637 675 669	621 646 637 618 673	576 600 498 506 611	593 624 549 560 639
11 12 13 14 15	792 951 953 875 936	585 765 855 724 764	682 842 908 778 849	517 517 530 526 429	503 508 502 410 375	512 513 514 439 409	536 558 557 443 434	434 512 359 380 353	471 530 407 422 389	729 758 712 705 555	673 611 627 555 536	699 684 678 610 540
16 17 18 19 20	922 884 962 1010 1070	765 807 855 868 974	833 849 910 928 1020	425 460 527 581 582	366 420 458 527 521	397 441 487 560 548	466 506 534 536 502	369 426 502 480 476	430 461 511 499 490	558 576 584 594 620	543 558 575 583 594	553 567 580 588 603
21 22 23 24 25	1080 1070 1020 979 543		1050 1040 998 788 484	521 414 379 387 398	413 358 359 368 379	450 375 369 380 385	498 487 435 505 626	476 394 406 435 482	486 442 420 480 546	638 641 651 654 650	620 631 635 649 638	629 637 642 652 644
26 27 28 29 30 31	301 323 407 	230 245 323 	247 276 378 	400 392 386 387 407 415	383 384 382 382 386 407	390 387 384 385 392 411	630 598 619 736 726	565 565 590 618 600	601 586 606 670 674	640 612 612 592 570 542	592 593 592 566 542 511	613 601 602 574 558 530
MONTH	1120	230	807	582	358	437	736	353	513	758	498	617
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN	MAX	MIN	MEAN	MAX	MIN SEPTEMBE	MEAN R
DAY 1 2 3 4 5	MAX 569 597 829 471 450		MEAN 531 565 679 433 411			455 445 431 461 459		AUGUST	MEAN 449 506 809 812 724	;		
1 2 3 4	569 597 829 471	JUNE 510 550 471 359	531 565 679 433	463 449 442 475	JULY 448 440 422 422	455 445 431 461	473 590 892 870	424 461 590 715	449 506 809 812	501 479 481 493	427 457 457 461 481	462 461 470 488
1 2 3 4 5 6 7 8 9 10	569 597 829 471 450 539 499 402 562 582 512 484	JUNE 510 550 471 359 377 450 386 368 402 472 484 456	531 565 679 433 411 489 434 380 462 500	463 449 442 475 464 569 597 640 666	JULY 448 440 422 422 433 455 556 593 640 653 707 592	455 445 431 461 459 510 583 607 652 718 757 762	473 590 892 870 771 763 700 634 598 614	424 461 590 715 695 700 634 587 586 585	449 506 809 812 724 716 674 609 589 601	501 479 481 493 498 526 540 558 652	427 457 461 481 481 494 526 528 558 641 695 665	462 461 470 488 488 513 533 536 614
1 2 3 4 5 6 7 8 9 10	569 597 829 471 450 539 499 402 562 582 512 484 458 457	JUNE 510 550 471 359 377 450 386 368 402 472 484 456 446 436	531 565 679 433 411 489 434 380 462 500 502 464 453 449	463 449 442 475 464 569 597 640 666 764 770 823 626 533	JULY 448 440 422 422 433 455 556 593 640 653 707 592 526 506	455 445 431 461 459 510 583 607 652 718 757 762 577 521	473 590 892 870 771 763 700 634 598 614 600 592 540 521	424 461 590 715 695 700 634 587 586 585 580 533 521 517	449 506 809 812 724 716 674 609 589 601 591 554 534 518	501 479 481 493 498 526 540 558 652 695 716 724 875 779	427 457 461 481 481 481 526 528 641 695 665 685 685	462 461 470 488 488 513 533 536 614 682 703 693 779 702
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	569 597 829 471 450 539 499 402 562 582 512 484 458 457 465 520 552 562 592	JUNE 510 550 471 359 377 450 386 368 402 472 484 456 446 436 434 465 506 537 503	531 565 679 433 411 489 434 380 462 500 502 464 453 449 448 500 524 535	463 449 442 475 464 569 597 640 666 764 770 823 626 533 513 498 512 534 549	JULY 448 440 422 423 433 455 556 593 640 653 707 592 526 506 494 477 479 487 482	455 445 431 461 459 510 583 607 652 718 757 762 577 521 505 490 490 520 520	473 590 892 870 771 763 700 634 598 614 600 592 540 521 527 530 554 594 649	424 441 590 715 695 700 634 587 586 585 580 533 521 517 516	449 506 809 812 724 716 674 609 589 601 591 534 518 522 524 537 577 579	501 479 481 493 498 526 540 558 652 695 716 724 875 779 688	427 457 461 481 481 494 526 528 641 695 665 685 659 632	462 461 470 488 488 513 533 536 614 682 703 693 779 702 670
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	569 597 829 471 450 539 499 402 562 582 512 484 457 465 520 552 562 592 520 474 383 672 655	JUNE 510 550 471 359 377 450 386 368 402 472 484 456 436 434 465 506 537 503 400 364 365 378 470	531 565 679 433 411 489 434 462 500 502 464 453 449 448 500 524 535 451 424 371 510 494	463 449 442 475 464 569 597 640 666 764 770 823 523 513 498 512 534 549 563	JULY 448 440 422 423 433 455 556 593 640 653 707 592 526 506 494 477 479 487 482 471 470 517 512 541	455 445 431 461 459 510 583 607 652 718 757 762 577 521 505 490 490 520 531 496 546 546 526 548	473 590 892 870 771 763 700 634 598 614 600 592 540 521 527 530 554 649 660 684 705 701 681	424 461 590 715 695 700 634 587 586 585 580 533 521 517 516 518 520 554 632 647 683 659 412	449 506 809 812 724 716 674 609 589 601 591 5534 518 522 524 537 669 647 666 692 672 672 672	501 479 481 493 498 526 540 558 652 695 716 724 875 779 688	427 457 461 481 481 494 526 528 641 695 665 685 669 632 336 346 271	462 461 470 488 488 513 533 536 614 682 703 693 779 702 670
1 2 3 4 4 5 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	569 569 597 829 471 450 539 499 402 562 582 512 484 457 465 520 552 562 562 562 562 562 562 562 562 562	JUNE 510 550 471 359 377 450 386 368 402 472 484 456 436 434 465 506 537 503 400 364 365 378 470 463 436 434 436 434 436 437 436 437 430 432	531 565 679 433 411 489 434 462 500 502 464 453 449 448 500 524 535 451 424 371 510 469 449 445 449 457	463 449 442 475 464 569 597 640 666 764 770 823 626 533 513 498 512 534 549 563 554 565 541 565 541 565 541 565	JULY 448 440 422 433 455 556 593 640 653 707 592 526 506 494 477 479 487 479 487 471 470 517 512 541 544 565 561 612 551	455 445 445 441 461 459 510 583 607 652 718 757 762 577 521 505 490 490 520 531 496 546 526 548 553 578 635 578 635 578	473 590 892 870 771 763 7000 634 598 614 600 592 540 521 527 530 554 660 684 705 701 681 538 583 563 551 416 510	424 441 590 715 695 700 634 587 586 585 580 533 521 517 516 518 520 554 632 647 683 659 412 397 428 404 346 357 405	449 506 809 812 724 716 674 609 589 601 591 534 534 537 577 629 647 666 692 678 522 455 541 476 457 398 455	501 479 481 493 498 526 540 558 652 695 716 724 875 779 688 364 365 358 327	427 457 461 481 481 494 526 528 641 695 665 665 665 665 632 336 346 271 293 311 321 327 332 297	462 461 470 488 488 513 533 536 614 682 703 693 7792 670 345 360 305 318 325 333 348 349 318

KANSAS RIVER BASIN

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06892350 KANSAS RIVER AT DESOTO, KS--Continued PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN I	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		OCTOBER		1	NOVEMBER	-		DECEMBER	!		JANUAR	Y
1 2 3 4 5	9.1 9.1 8.9 8.5 8.4	8.6 8.7 8.5 8.2 7.9	8.9 8.9 8.7 8.4 8.2	8.4 8.1 8.2 8.3 8.1	8.1 7.7 7.9 7.9 7.8	8.3 7.8 8.0 8.1 8.0		7.9	8.0 8.0 8.0 8.0	 		
6 7 8 9 10	8.7 8.5 8.6 8.7 8.7	7.9 8.1 8.3 8.4 8.3	8.2 8.4 8.4 8.5 8.5	7.9 8.0 8.0 7.9 8.0	7.6 7.8 7.7 7.9	7.8 7.7 7.9 7.8 7.9	8.1 8.1 8.3 8.2 8.2	8.0 8.0 8.1	8.0 8.0 8.1 8.2 8.1	 	 	
11 12 13 14 15	8.8 8.8 8.9 9.0 8.4	8.4 8.3 8.4 8.4	8.6 8.6 8.7 8.7	7.9 7.9 7.9 8.0 8.0	7.8 7.8 7.8 7.8 7.9	7.9 7.8 7.9 7.9	 	 	 	8.5 8.5 8.4 8.5	8.3 8.3 8.4 8.4	8.4 8.4 8.4 8.4
16 17 18 19 20	8.9 9.1 9.0 9.1 8.8	8.3 8.4 8.4 8.3 8.1	8.4 8.7 8.8 8.7 8.5	8.0 7.9 7.9 8.0 7.9	7.9 7.8 7.8 7.8 7.8	7.9 7.9 7.9 7.9	 	 	 	8.5 8.4 8.3 8.4 8.3	8.3	8.4 8.3 8.3 8.3
21 22 23 24 25	8.6 8.5 8.5 8.6	8.1 8.1 8.0 8.0 8.1	8.4 8.3 8.2 8.2 8.3	7.8 7.9 7.9 8.2 8.3	7.7 7.8 7.9 7.9 8.0	7.8 7.9 7.9 7.9 8.2	 	 	 	8.3 8.3 8.5 8.4 8.5	8.3	8.3 8.3 8.4 8.4
26 27 28 29 30 31	8.5 8.6 8.6 8.8 8.7	8.0 8.1 8.1 8.1 8.2 8.3	8.2 8.2 8.4 8.4 8.5	8.2 8.2 8.1 8.1	8.0 8.0 7.9 8.0	8.2 8.1 8.0 8.0	 	 	 	8.5 8.4 8.4 8.3 8.3	8.3 8.2 8.2	8.4 8.4 8.3 8.3 8.2
MAX MIN	9.1 8.4	8.7 7.9	8.9 8.2	8.4 7.8	8.1 7.6	8.3 7.7	8.3 8.0	8.1 7.9	8.2 8.0	8.5 8.3	8.4 8.2	8.4 8.2
DAY	MAX	MIN I	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
DAY		MIN 1		MAX	MIN MARCH	MEDIAN	MAX	MIN APRIL		MAX	MIN MAY	
DAY 1 2 3 4 5		FEBRUARY 8.2 8.2 8.2		8.0 8.1 8.1 8.1 8.1		7.9 8.0 8.1 8.1				8.3 8.3 8.2 8.2		MEDIAN 8.3 8.2 8.2 8.2 8.1
1 2 3 4	8.3 8.3 8.2	8.2 8.2 8.2 8.2 	8.3 8.2 e8.2	8.0 8.1 8.1 8.1	MARCH 7.8 7.9 8.1 8.1	7.9 8.0 8.1 8.1	8.0 8.0 8.0	7.9 7.9 8.0 7.9 7.9 7.9 7.9 8.1 8.1	8.0 8.0 8.0	8.3 8.3 8.2 8.2	MAY 8.2 8.2 8.2 8.1	8.3 8.2 8.2 8.2
1 2 3 4 5 6 7 8	8.3 8.3 8.2 8.3 8.3 8.4 8.1	8.2 8.2 8.2 8.2 8.3 8.3 8.0 7.8	8.3 8.2 e8.2 8.3 8.3 8.4 7.9	8.0 8.1 8.1 8.1 8.1 8.1 8.1	7.8 7.9 8.1 8.1 8.1 8.1 8.1	7.9 8.0 8.1 8.1 8.1 8.1 8.1	8.0 8.0 8.0 8.0 7.9 8.1 8.2 8.3	7.9 7.9 8.0 7.9 7.9 7.9 7.9 8.1 8.1	8.0 8.0 8.0 8.0 8.0 7.9 8.0 8.1	8.3 8.3 8.2 8.2 8.2 8.1 8.1	MAY 8.2 8.2 8.2 8.1 8.0 8.0 8.1 7.9 8.0 8.1	8.3 8.2 8.2 8.2 8.1 8.0 8.1 8.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14	8.3 8.3 8.2 8.3 8.3 8.4 8.1 8.1	8.2 8.2 8.2 8.3 8.3 8.0 7.8 8.0 8.0 8.0 8.0 8.0	8.3 8.2 e8.2 8.3 8.3 8.4 7.9 8.1 8.0 8.1 8.1	8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.2 8.1	MARCH 7.8 7.9 8.1 8.1 8.0 8.1 8.1 8.1 8.1 8.1 8.1	7.9 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.0 8.0 8.0 8.0 8.0 7.9 8.1 8.2 2.8.3 8.3 8.0 8.0 8.0	7.9 7.9 8.0 7.9 7.9 7.9 7.9 8.1 8.0 7.8 7.8 7.8	8.0 8.0 8.0 8.0 7.9 8.0 8.1 8.2 7.9 8.0	8.3 8.3 8.2 8.2 8.2 8.1 8.1 8.1 8.3 8.4 8.3	MAY 8.2 8.2 8.2 8.1 8.0 8.0 8.1 7.9 8.0 8.1 8.2 8.1 8.2	8.3 8.2 8.2 8.1 8.0 8.1 8.2 8.3 8.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	8.3 8.3 8.2 8.3 8.3 8.4 8.1 8.1 8.1 8.1 8.1 8.1	8.2 8.2 8.2 8.2 8.3 8.3 8.0 7.8 8.0 8.0 8.0 8.0 8.0 8.0 8.0	8.3 8.2 e8.2 8.3 8.3 8.4 7.9 8.1 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.2 8.1 8.2 8.3	MARCH 7.8 7.9 8.1 8.1 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	7.9 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.0 8.0 8.0 8.0 8.0 7.9 8.1 8.2 8.3 8.3 8.0 8.0 8.1 8.1 7.9 8.1 8.1	7.9 7.9 8.0 7.9 7.9 7.9 7.9 7.9 7.8 1.8.0 7.8 7.8 7.8 7.8 7.8 7.8 1.8.1	8.0 8.0 8.0 8.0 7.9 8.0 8.1 8.2 7.9 8.0 7.9 7.9 8.1 8.2	8.3 8.2 8.2 8.2 8.1 8.1 8.1 8.3 8.4 8.3 8.4 8.3 8.1 8.1	MAY 8.2 8.2 8.2 8.1 8.0 8.1 7.9 8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.3 8.2 8.2 8.1 8.0 8.1 8.2 8.3 8.2 8.3 8.2 8.1 8.1 8.1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	8.3 8.3 8.2 8.3 8.3 8.4 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.2 8.2 8.2 8.2 8.3 8.3 8.0 7.8 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8	8.3 8.2 8.3 8.3 8.4 7.9 8.1 8.0 8.1 8.1 8.1 8.0 8.1 8.1 8.0 8.1 8.1 8.0 8.1	8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.2 8.1 8.2 8.1 8.3 8.3 8.4 8.4	MARCH 7.8 7.9 8.1 8.1 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	7.9 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.0 8.0 8.0 8.0 8.0 7.9 8.1 8.2 8.3 8.3 8.0 8.0 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1	7.9 7.9 8.0 7.9 7.9 7.9 7.9 7.9 7.8 1.8.0 7.8 7.8 7.8 7.8 7.8 7.9 8.1 8.1 8.1 8.1 8.1	8.0 8.0 8.0 8.0 8.0 7.9 8.0 7.9 8.0 7.9 7.9 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.3 8.2 8.2 8.2 8.1 8.1 8.1 8.3 8.4 8.3 8.1 8.1 8.1 8.1 8.1 8.1 8.1	MAY 8.2 8.2 8.2 8.1 8.0 8.1 7.9 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.3 8.2 8.2 8.1 8.0 8.1 8.2 8.3 8.2 8.1 8.1 8.1 8.1 8.1 8.1

06892350 KANSAS RIVER AT DESOTO, KS--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

	•	•	•	•								
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			JULY			AUGUST			SEPTEMB	ER
1 2 3 4 5	8.2 8.2 8.2 8.1 8.0	8.1 8.1 8.0 7.8 7.8	8.2 8.2 8.2 7.9 7.9	7.9 8.0 8.0 8.0	7.9 7.9 7.9 7.9 7.9	7.9 7.9 7.9 8.0 8.0	8.5 8.8 8.8 9.0 8.8	8.1 8.2 8.5 8.6 8.5	8.2 8.4 8.7 8.7	8.1 8.2 8.2 8.4 8.4	8.0 8.1 8.2 8.2 8.3	8.1 8.1 8.2 8.3
6 7 8 9 10	8.0 7.9 8.0 8.0	7.9 7.8 7.8 8.0 8.0	7.9 7.9 7.8 8.0 8.0	8.1 8.2 8.2 8.3 8.5	8.0 8.1 8.1 8.1 8.2	8.1 8.1 8.2 8.2	8.5 8.3 8.3 8.4 8.4	8.3 8.2 8.2 8.2 8.3	8.4 8.3 8.2 8.3 8.3	8.6 8.8 8.9 9.0 9.0	8.3 8.4 8.5 8.7	8.4 8.5 8.7 8.9
11 12 13 14 15	8.0 8.0 8.0 8.0 7.9	7.9 7.9 8.0 7.9 7.9	8.0 7.9 8.0 8.0 7.9	8.5 8.6 8.4 8.5 8.6	8.4 8.2 8.1 8.3 8.3	8.4 8.4 8.3 8.4	8.4 8.4 8.7 8.9 9.0	8.3 8.2 8.3 8.4 8.6	8.3 8.3 8.4 8.6 8.8	9.0 8.9 8.9 9.0 8.8	8.7 8.6 8.6 8.7 8.5	8.8 8.8 8.9 8.7
16 17 18 19 20	7.9 8.0 8.0 8.0 7.9	7.9 7.9 7.9 7.9 7.7	7.9 7.9 8.0 7.9 7.8	8.6 8.7 8.6 8.9	8.3 8.4 8.3 8.2 8.5	8.5 8.6 8.5 8.4 8.7	9.2 9.1 9.2 9.1	8.6 8.8 8.7 8.5	8.8 8.9 9.0 9.0	8.5 8.0 8.0 7.9 8.1	7.9 7.9 7.9 7.9	8.4 7.9 7.9 7.9 8.0
21 22 23 24 25	7.8 7.7 7.9 7.8 7.8	7.7 7.6 7.7 7.8 7.8	7.7 7.7 7.8 7.8 7.8	8.9 8.9 8.7 8.9	8.5 8.4 8.2 8.4 8.5	8.7 8.6 8.4 8.6 8.7	8.9 9.1 9.0 8.5 8.1	8.5 8.5 8.2 7.8 7.8	8.8 8.8 8.7 7.9	8.1 8.0 8.0 7.9 8.0	8.0 8.0 7.9 7.7 7.9	8.0 8.0 8.0 7.9 8.0
26 27 28 29 30 31	7.8 7.8 7.9 7.9 7.9	7.8 7.8 7.8 7.8 7.8	7.8 7.8 7.9 7.9	8.7 8.8 8.9 8.7 8.4 8.2	8.4 8.3 8.5 8.3 8.2	8.6 8.5 8.7 8.5 8.2 8.1	8.2 8.1 7.9 8.0 8.1 8.1	7.9 7.9 7.8 7.9 8.0	8.2 7.9 7.8 7.9 8.0 8.0	8.1 8.1 8.2 8.2	8.0 8.1 8.1 8.1	8.1 8.1 8.2 8.2
MAX MIN	8.2 7.7	8.1 7.6	8.2 7.7	8.9 7.9	8.5 7.9	8.7 7.9	9.2 7.9	8.8 7.8	9.0 7.8	9.0 7.9	8.8 7.7	8.9 7.9

e Estimated

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		N	OVEMBER		DE	CEMBER			JANUARY	
1 2 3 4 5	21.2 22.0 23.5 22.5 18.0	17.6 18.3 19.3 17.7 15.7	19.4 20.1 21.4 19.2 17.3	19.8 18.3 16.3 16.2 14.0	17.3 15.9 13.7 12.6 13.3	18.8 17.0 14.9 14.2 13.7	4.1 4.6 3.7 5.0 3.3	3.0 2.5 .9 1.9	3.4 3.4 2.3 3.3 2.1	 	 	
6 7 8 9 10	15.7 13.1 13.0 13.4 14.6	12.4 10.6 8.9 9.1 9.2	13.8 11.7 10.8 11.1 11.7	14.2 11.6 9.5 7.3 6.0	11.6 9.5 6.9 5.2 4.1	13.3 10.6 8.1 6.4 4.9	3.5 5.2 3.8 3.8 3.8	1.1 1.4 2.7 2.2 .9	2.1 3.2 3.4 3.0 3.1	 	 	
11 12 13 14 15	15.0 17.0 17.2 18.1 18.1	10.7 12.4 14.8 16.0 16.5	12.6 14.6 16.0 16.9 17.1	4.5 6.9 4.7 5.9 5.1	4.1 4.2 1.8 2.6 2.7	4.3 5.3 3.4 4.0 3.9	.9 	.0 	e.1 	.1 .1 .1 .1	.0 .0 .0	e.0 .0 .0 .0
16 17 18 19 20	17.7 17.7 20.1 20.6 21.2	16.1 15.2 14.6 16.9 16.6	16.8 16.4 17.2 18.5 18.8	4.5 4.2 4.3 4.7 3.0	1.8 .8 1.5 2.1	3.3 2.3 2.7 3.1 1.8	 	 	 	.0 .1 .1 .1	.0 .0 .0	.0
21 22 23 24 25	20.0 19.1 21.2 20.1 19.5	17.1 17.6 18.0 18.2 18.5	18.5 18.3 19.2 19.1 19.0	4.1 3.3 4.5 6.6 6.0	.0 1.1 1.5 3.6 2.7	1.8 2.1 3.0 4.4 4.1	 	 	 	.1 .1 .1 .2	.0.0.0	.0 .0 .0 .1
26 27 28 29 30 31	19.7 19.6 19.4 18.4 20.8 20.8	18.0 18.2 17.6 16.4 17.0 18.1	18.7 18.7 18.4 17.4 18.6 19.2	5.7 5.6 7.5 5.8 4.9	1.2 .2 2.1 3.4 2.5	2.7 2.9 5.1 4.6 3.8	 		 	.1 .1 .1 .2 .4	.0 .0 .0 .0	.1 .0 .0 .1 .2
MONTH	23.5	8.9	17.0	19.8	.0	6.3	5.2	.0	2.7	1.2	.0	.0

06892350 KANSAS RIVER AT DESOTO, KS--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	1.2 .3 1.9 3.2	.0 .0 .0	.4 .1 e.5 	1.7 2.5 3.5 3.9 4.6	.7 1.7 2.4 2.8 3.4	1.1 2.1 2.9 3.4 3.9	9.2 9.2 9.8 10.7 12.9	8.4 8.3 9.0 9.5 10.6	8.9 8.8 9.4 10.0 11.7	23.1 22.2 21.8 22.7 21.8	18.6 19.5 20.1 19.5 20.2	20.8 21.1 21.0 21.1 21.1
6 7 8 9 10	4.4 4.7 5.4 2.7 1.1	1.3 1.6 2.5 .1	2.6 2.9 4.4 1.1	5.0 4.8 5.1 5.6 6.7	3.7 3.8 3.1 3.6 4.2	4.2 4.4 4.0 4.4 5.5	15.5 18.1 20.1 21.8 20.9	12.7 14.5 15.3 17.8 18.4	14.2 16.2 17.7 19.8 19.3	21.4 21.5 22.3 23.9 25.3	19.8 19.0 20.0 19.7 20.9	20.5 20.2 21.1 21.7 22.9
11 12 13 14 15		0		77	5.4 5.7 5.9 6.7 7.6	5.8 6.4 6.7 7.2 8.2	15.8 15.9 16.8 15.6	15.3	 15.2 15.8 15.1	25.1 24.0 23.9 24.9 25.6	22.0 22.3 22.0 22.5 23.5	23.4 23.0 22.8 23.6 24.5
16 17 18 19 20			.5	7.8 7.3 7.9 9.5 9.4	6.2 6.0 6.6 7.0 7.7	6.7 6.5 7.2 8.0 8.5	15.0 13.0 13.7 14.5 16.9	12.6 11.8 11.8 12.8 14.2		26.9 27.6 25.4 26.0 24.4		25.3 26.0 25.1 24.7 23.8
21 22 23 24 25	2.1 5.2 3.1 3.9 4.0	.4 .5 1.5 1.9	1.0 2.7 2.0 3.1 3.0	8.4 8.2 7.5 7.2 6.6		8.3 7.7 7.2 6.6 6.2	19.5 19.5 18.8 18.1 19.3	16.7 18.7 16.3 15.1 15.4	18.2 19.1 17.6 16.5 17.2	22.8 20.0 19.2 18.0 18.6	20.0 18.1 17.5 16.7 16.5	21.3 19.3 18.2 17.3 17.4
26 27 28 29 30 31	2.1 2.1 .8 	1.1 .8 .3 	1.6 1.5 .6 	6.6 7.0 7.0 7.3 8.5 9.4	5.6 5.7 6.5 6.3 7.0 8.3	6.2 6.4 6.7 6.8 7.7 8.8	21.5 23.1 23.7 23.6 21.7	16.6 18.5 19.3 19.9		19.4 21.6 23.4 22.8 21.7 20.3		18.4 20.0 22.0 22.4 21.1 19.3
MONTH	5.7	.0	1.6	9.5	.7	6.0	23.7	8.3	15.8	27.6	16.5	21.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE			JULY	MEAN	MAX				SEPTEMBE	
DAY 1 2 3 4 5	MAX 20.7 21.7 20.9 18.3 18.9	JUNE 17.4		26.3 26.4 26.6 27.6 28.1	JULY	25.7		AUGUST			SEPTEMBE	
1 2 3 4	20.7 21.7 20.9 18.3	JUNE 17.4 19.0 18.3 16.9	18.8 20.3 20.2 17.6 18.1 19.3 21.1 21.7 22.5 23.2	26.3 26.4 26.6 27.6 28.1 29.9 31.0 31.8 33.1 32.8	JULY 25.2 25.6 25.5 26.3 27.1 26.9 28.2 28.9 29.0 29.1	25.7 26.0 26.1 26.8 27.5 28.3 29.5 30.2 30.9 30.9	31.4 33.0 33.8 34.0 33.5 32.8 32.3 33.0 31.5	28.8 28.6 30.0 29.5 29.7 29.5 28.8 29.0 29.3 26.8	30.1 30.6 31.6 31.7 31.9		24.4 24.6 25.1 25.7 25.6	25.7 26.1 27.1 27.7
1 2 3 4 5 6 7 8 9 10	20.7 21.7 20.9 18.3 18.9 20.4 22.2 22.1 23.5	JUNE 17.4 19.0 18.3 16.9 17.7 18.6 20.1 21.4 21.5 22.5	18.8 20.3 20.2 17.6 18.1 19.3 21.1 21.7 22.5 23.2	26.3 26.4 26.6 27.6 28.1	JULY 25.2 25.6 25.5 26.3 27.1 26.9 28.2 28.9 29.0 29.1	25.7 26.0 26.1 26.8 27.5 28.3 29.5 30.2 30.9 30.9	31.4 33.0 33.0 33.8 34.0	28.8 28.6 30.0 29.5 29.7 29.5 28.8 29.0 29.3 26.8	30.1 30.6 31.6 31.7 31.9 31.6 30.9 30.7 31.0 28.3	26.9 27.9 29.3 29.6 29.0	24.4 24.6 25.1 25.7 25.6 25.8 24.8 23.4 21.8 20.8	25.7 26.1 27.1 27.7 27.4 26.9 25.7 24.4 23.3 23.0 23.1 23.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14	20.7 21.7 20.9 18.3 18.9 20.4 22.2 123.5 23.7 24.7 25.0 24.9 24.6	JUNE 17.4 19.0 18.3 16.9 17.7 18.6 20.1 21.4 21.5 22.5 23.2 23.8 23.9 23.3 22.4	18.8 20.3 20.2 17.6 18.1 19.3 21.1 22.5 23.2 23.9 24.4 24.4 24.0	26.3 26.4 26.6 27.6 28.1 29.9 31.0 31.8 33.1 32.8 31.6 30.2 26.6 27.3	JULY 25.2 25.6 25.5 26.3 27.1 26.9 28.2 28.9 29.0 29.1 28.3 26.0 24.2 25.0	25.7 26.0 26.1 26.8 27.5 28.3 29.5 30.9 30.9 30.9	31.4 33.0 33.8 34.0 33.5 32.8 32.3 33.0 31.5 28.7 29.8 30.3 30.1	28.8 28.6 30.0 29.5 29.7 29.5 28.8 29.0 29.3 26.8 26.0 25.3 26.1 26.2	30.1 30.6 31.6 31.7 31.9 31.6 30.9 30.7 31.0 28.3 27.4 27.6 28.2 28.2	26.9 27.9 29.3 29.6 29.0 27.8 26.5 25.5 24.6 25.3 24.8 26.0 24.6	24.4 24.6 25.1 25.7 25.6 25.8 24.8 24.8 20.8 21.3 21.5 22.4 21.6	25.7 26.1 27.1 27.7 27.4 26.9 25.7 24.4 23.3 23.0 23.1 23.8 24.3 23.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	20.7 21.7 20.9 18.3 18.9 20.4 22.2 123.5 23.7 24.7 25.0 24.6 23.8 24.5 25.4 25.4 25.0	JUNE 17.4 19.0 18.3 16.9 17.7 18.6 20.1 21.4 21.5 22.5 23.2 23.8 23.9 23.3 22.4 22.8 23.9 24.4 23.0	18.8 20.3 20.2 17.6 18.1 19.3 21.1 22.5 23.2 23.9 24.4 24.0 23.1 23.6 24.6 24.9 24.0	26.3 26.4 26.6 27.6 28.1 29.9 31.0 31.8 33.1 32.8 31.6 30.2 26.6 27.3 26.8 27.5 29.4 31.5 31.3	JULY 25.2 25.6 25.5 26.3 27.1 26.9 28.2 28.9 29.0 29.1 28.3 26.0 24.7 24.6 25.5 27.4 27.7	25.7 26.0 26.1 26.8 27.5 28.3 29.5 30.2 30.9 30.9 30.9 30.2 25.6 26.1 25.7 25.9 27.4 29.6	31.4 33.0 33.8 34.0 33.5 32.8 32.3 33.0 31.5 28.7 29.8 30.3 30.1 28.0 26.7 27.6	28.8 28.6 30.0 29.5 29.7 29.5 28.8 29.0 29.3 26.8 26.0 25.3 26.1 26.2 25.3 24.0 24.2 24.6 23.9 24.9 25.6	30.1 30.6 31.6 31.7 31.9 31.6 30.9 30.7 31.0 28.3 27.4 27.6 28.2 28.2 26.5 26.0 25.3 25.9 25.8	26.9 27.9 29.3 29.6 29.0 27.8 26.5 25.5 24.6 25.3 24.8 26.0 24.6 22.5 20.3 20.1 20.4 20.5	24.4 24.6 25.1 25.7 25.6 25.8 24.8 20.8 21.3 21.5 22.4 21.6 20.3 18.8 18.6 19.8	25.7 26.1 27.1 27.7 27.4 26.9 25.7 24.4 23.3 23.0 23.1 23.8 24.3 23.0 21.1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	20.7 21.7 20.9 18.3 18.9 20.4 22.2 23.5 23.7 24.7 25.0 24.6 23.8 24.5 25.4 25.4 25.4 25.0 23.0	JUNE 17.4 19.0 18.3 16.9 17.7 18.6 20.1 21.4 21.5 22.5 23.2 23.8 23.9 23.3 22.4 22.8 23.9 24.4 23.0 21.2 21.0 21.0 22.7 23.2 23.9 24.0 24.0 24.2	18.8 20.3 20.2 17.6 18.1 19.3 21.1 22.5 23.2 23.9 24.4 24.0 23.1 23.6 24.6 24.9 21.7 21.7	26.3 26.4 26.6 27.6 28.1 29.9 31.0 31.8 33.1 32.8 31.6 30.2 26.6 27.3 26.8 27.5 29.4 31.3 31.3 31.3	JULY 25.2 25.6 25.5 26.3 27.1 26.9 28.2 28.9 29.0 29.1 28.3 26.0 24.7 24.6 25.5 27.4 27.7 28.0 28.1 28.9 28.8 28.5	25.7 26.0 26.1 26.8 27.5 28.3 29.5 30.2 30.9 30.9 30.2 25.6 26.1 25.7 25.9 27.4 29.6 29.8 30.7 30.7 30.7	31.4 33.0 33.8 34.0 33.5 32.8 32.3 33.0 31.5 28.7 29.8 30.1 28.0 26.7 27.6 27.6 27.6 27.6 27.6 29.1 28.7	28.8 28.6 30.0 29.5 29.7 29.5 28.8 29.0 29.3 26.8 26.0 25.3 26.1 24.0 24.2 24.6 23.9 24.9 25.6 26.0 25.3 24.0 24.2 24.6 25.3	30.1 30.6 31.7 31.9 31.6 30.9 30.7 31.0 28.3 27.4 27.6 28.2 28.2 26.5 26.5 26.0 25.3 25.8 26.2 27.2 27.2 27.2 26.3	26.9 27.9 29.3 29.6 29.0 27.8 26.5 25.5 24.6 25.3 24.8 26.0 24.6 22.5 20.3 20.1 20.4 20.5 22.1	24.4 24.6 25.1 25.7 25.6 25.8 24.8 20.8 21.3 21.5 22.4 21.6 20.3 18.8 19.5 20.4 21.9 22.0 20.0 19.0	25.7 26.1 27.1 27.7 27.4 26.9 25.7 24.4 23.3 23.0 23.1 23.8 24.3 23.0 21.1 19.7 19.4 20.0 21.4 22.4 22.3 21.1 19.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	20.7 21.7 20.9 18.3 18.9 20.4 22.2 22.1 23.5 23.7 24.7 25.0 24.9 24.6 23.8 24.5 25.4 25.4 25.4 25.0 23.0 21.8 22.9 24.3 25.0 25.0 25.0 25.0 25.0 25.0 25.0 25.0	JUNE 17.4 19.0 18.3 16.9 17.7 18.6 20.1 21.4 21.5 22.5 23.2 23.8 23.9 23.3 22.4 22.8 23.9 24.4 23.0 21.2 21.0 21.0 22.7 23.2 23.9 24.0 24.2 24.4 24.4	18.8 20.3 20.2 17.6 18.1 19.3 21.1 22.5 23.2 23.9 24.4 24.4 24.0 23.1 23.6 24.6 24.9 21.7 21.8 23.3 24.6 24.6 24.6 24.6 24.6 24.6 24.6 24.6	26.3 26.4 26.6 27.6 28.1 29.9 31.0 31.8 33.1 32.8 31.6 27.3 26.8 27.5 29.4 31.3 31.3 31.3 32.2 32.8 31.6 31.3 31.3 32.2 32.8 31.6 31.3 32.2 32.8	JULY 25.2 25.6 25.5 26.3 27.1 26.9 28.2 28.9 29.0 29.1 28.3 26.0 24.7 24.6 25.5 27.4 27.7 28.0 28.1 28.9 28.8 28.5 27.7 26.9 28.4	25.7 26.0 26.1 26.8 27.5 28.3 29.5 30.9 30.9 30.2 28.2 25.6 26.1 25.7 25.9 27.4 29.2 29.6 29.8 30.7 30.9 30.7 30.9 30.7 30.9 30.7 30.9 30.9 30.9	31.4 33.0 33.8 34.0 33.5 32.8 32.3 33.0 31.5 28.7 29.8 30.3 30.1 28.0 26.7 27.6 27.6 27.6 29.1 28.7 28.7 28.7 27.4 28.7 28.4 28.9 30.0 28.9	28.8 28.6 30.0 29.5 29.7 29.5 28.8 29.0 29.3 26.8 26.0 25.3 26.1 26.2 25.3 24.0 24.2 24.6 23.9 24.9 25.6 26.0 25.3 24.9 25.6 26.0 25.3 26.0 26.0 27.0 28.0 29.0 29.0 29.0 29.0 29.0 29.0 29.0 29	30.1 30.6 31.6 31.7 31.9 31.6 30.9 30.7 31.0 28.3 27.4 27.6 28.2 28.2 26.5 26.0 25.3 25.9 26.2 27.2 27.2 26.7 26.3 26.1	26.9 27.9 29.3 29.6 29.0 27.8 26.5 25.5 24.6 25.3 24.8 26.0 24.6 22.5 20.3 20.1 20.5 22.1 22.9 22.5 22.0 20.0 19.4 19.7 20.1 20.5 20.2 20.3	SEPTEMBE 24.4 24.6 25.1 25.7 25.6 25.8 24.8 20.8 21.3 21.5 22.4 21.6 20.3 18.8 18.6 19.8 19.5 20.4 21.9 22.0 20.0 19.0 18.5	25.7 26.1 27.7 27.4 26.9 25.7 24.4 23.3 23.0 21.1 19.7 19.4 20.1 20.0 21.4 22.4 22.3 21.1 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0

e Estimated

06892350 KANSAS RIVER AT DESOTO, KS--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		OXYC	BEN DISC	OLVED (MG/	L), WAIL	A ILAK C	CTOBER 200	O IO SEE	TEMBER 2	2001		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		1	OVEMBER		Ε	ECEMBER			JANUARY	Z
1	14.4	8.5	11.1	13.7	9.4	11.0	14.3	13.4	13.8			
2 3	$14.3 \\ 12.1$	8.4 8.3	11.0 10.1	11.1 15.3	9.3 10.3	$\frac{10.2}{12.4}$	14.5 14.8	13.9 14.4	$14.2 \\ 14.6$			
4 5	11.1 10.9	8.3 8.7	9.6 9.7	16.6 14.1	11.1 11.3	13.4 12.4	14.5 15.1	$14.1 \\ 14.1$	14.3 14.7			
6 7	13.3 13.1	9.2 10.7	11.1 11.8	12.4	10.3	11.2	14.8 14.6	14.5 13.9	14.7 14.3			
8 9	13.7 14.4	11.3 11.5	12.5 12.9				15.5 15.5	13.6 14.8	14.6 15.1			
10	14.6	11.3	12.9				16.0	14.5	15.2			
11	15.2	11.7	13.2									16.6
12 13	15.8 15.8	11.1 10.8	13.0 12.7							17.0 16.7	16.2 16.0	16.6 16.4
14 15	15.7 11.4	9.9 9.7	12.0 10.2	12.6	11.9	12.3				16.4 17.4	15.8 16.0	16.2 16.6
16	15.2	10.1	12.1	12.8	11.8	12.3						
17	17.1	10.5	13.1	12.8	12.4	12.7						
18 19	16.6 15.6	10.3 9.6	13.0 12.1	13.0 12.9	12.6 12.3	12.8 12.7						
20	15.2	8.3	12.0	13.4	12.8	13.0						
21	13.7	9.4	11.1	13.4	12.5	13.0						
22 23	13.0 13.4	9.4 9.6	10.8 11.1	13.4 13.3	13.1 12.6	13.2 13.0						
24	13.9	9.2	11.0 11.0	13.7	12.6	12.9 13.5				14.5	13.5	14.0 14.3
25	13.7	9.4		14.0	12.9					14.6	13.9	
26 27	13.4 15.3	9.2 9.5	10.9 11.7	14.5 15.3	13.0 13.4	14.0 14.2				14.2 14.8	13.7 14.1	14.0 14.5
28	15.5	9.4	11.9	14.5	12.9	13.4				14.7	14.2	14.5
29 30	15.0 17.0	10.2 9.8	12.0 12.7	13.9 14.0	13.2 13.5	13.6 13.8				14.4 14.0	14.0 13.7	14.2 13.8
31	16.1	9.8	12.3							14.2	13.9	14.1
MONTH	17.1	8.3	11.7	16.6	9.3	12.8	16.0	13.4	14.6	17.4	13.5	14.9
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY		MIN FEBRUARY		MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	15.1	FEBRUARY	14.6		MARCH		12.0	APRIL	11.8	8.3	MAY 8.0	8.2
1 2		FEBRUARY			MARCH			APRIL 11.7 11.7		8.3 8.2	MAY	8.2 8.1
1 2 3 4	15.1 15.3 15.0	FEBRUARY 14.2 15.0 	14.6 15.1 		MARCH		12.0 12.0 11.9 11.7	APRIL 11.7 11.7 11.7 11.4	11.8 11.8 11.8 11.6	8.3 8.2 8.3 8.3	MAY 8.0 8.0 8.0 7.8	8.2 8.1 8.2 8.1
1 2 3 4 5	15.1 15.3 15.0 15.4	FEBRUARY 14.2 15.0 14.7	14.6 15.1 14.9	 	MARCH	 	12.0 12.0 11.9 11.7 11.5	11.7 11.7 11.7 11.7 11.4 10.8	11.8 11.8 11.8 11.6 11.2	8.3 8.2 8.3 8.3 7.8	MAY 8.0 8.0 8.0 7.8 7.4	8.2 8.1 8.2 8.1 7.6
1 2 3 4	15.1 15.3 15.0	FEBRUARY 14.2 15.0 	14.6 15.1 		MARCH		12.0 12.0 11.9 11.7 11.5	APRIL 11.7 11.7 11.7 11.4	11.8 11.8 11.8 11.6	8.3 8.2 8.3 8.3	MAY 8.0 8.0 8.0 7.8	8.2 8.1 8.2 8.1
1 2 3 4 5	15.1 15.3 15.0 15.4 15.4 15.4 15.0	14.2 15.0 14.7 14.8 14.5 14.1	14.6 15.1 14.9 15.1 15.1 14.5	==== ==== ==== ====	MARCH	==== ==== ====	12.0 12.0 11.9 11.7 11.5 10.8 10.1	APRIL 11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.8	11.8 11.8 11.6 11.2	8.3 8.2 8.3 7.8 7.9 8.7	MAY 8.0 8.0 7.8 7.4 7.6 7.9 8.0	8.2 8.1 8.2 8.1 7.6 7.7 8.3 8.2
1 2 3 4 5	15.1 15.3 15.0 15.4 15.4	14.2 15.0 14.7 14.8 14.5	14.6 15.1 14.9 15.1 15.1	 	MARCH	====	12.0 12.0 11.9 11.7 11.5	APRIL 11.7 11.7 11.7 11.4 10.8	11.8 11.8 11.6 11.2	8.3 8.2 8.3 7.8 7.9	MAY 8.0 8.0 8.0 7.8 7.4 7.6 7.9	8.2 8.1 8.2 8.1 7.6 7.7 8.3
1 2 3 4 5 6 7 8 9 10	15.1 15.3 15.0 15.4 15.4 15.4 15.0 16.6 17.2	14.2 15.0 14.7 14.8 14.5 14.1 14.8 16.6	14.6 15.1 14.9 15.1 15.1 14.5 15.4 16.9		MARCH		12.0 12.0 11.9 11.7 11.5 10.8 10.1 10.4 11.8 10.4	APRIL 11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.8 9.7 9.2 8.7	11.8 11.8 11.6 11.2 10.3 10.0 10.1 10.5 9.9	8.3 8.2 8.3 7.8 7.9 8.7 8.6 8.5 8.5	MAY 8.0 8.0 8.0 7.8 7.4 7.6 7.9 8.0 8.1 7.9	8.2 8.1 8.2 8.1 7.6 7.7 8.3 8.2 8.2 8.3
1 2 3 4 5 6 7 8 9 10	15.1 15.3 15.0 15.4 15.4 15.4 15.0 16.6 17.2	14.2 15.0 14.7 14.8 14.5 14.1 14.8 16.6	14.6 15.1 14.9 15.1 15.1 14.5 15.4 16.9		MARCH	 	12.0 12.0 11.9 11.7 11.5 10.8 10.1 10.4 11.8 10.4	APRIL 11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.8 9.7 9.2	11.8 11.8 11.6 11.2 10.3 10.0 10.1 10.5 9.9	8.3 8.2 8.3 8.3 7.8 7.9 8.7 8.6 8.5 8.5	MAY 8.0 8.0 8.0 7.8 7.4 7.6 7.9 8.1 7.9 7.8	8.2 8.1 8.2 8.1 7.6 6 7.7 8.3 8.2 8.3
1 2 3 4 5 6 7 8 9 10	15.1 15.3 15.0 15.4 15.4 15.4 15.0 16.6 17.2 17.2 17.0 16.9 16.5	14.2 15.0 14.7 14.8 14.5 14.1 14.8 16.6	14.6 15.1 14.9 15.1 14.5 15.4 16.9 16.9 16.5 16.2		MARCH		12.0 12.0 11.9 11.7 11.5 10.8 10.1 10.4 11.8 10.4	11.7 11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.7 9.2 8.7 10.1 9.9	11.8 11.8 11.6 11.2 10.3 10.0 10.1 10.5 9.9 9.3 10.8 10.3 9.8	8.3 8.2 8.3 7.8 7.9 8.7 8.6 8.5 8.5 8.5	MAY 8.0 8.0 7.8 7.4 7.6 7.9 8.1 7.9 7.8 7.9	8.2 8.1 8.2 8.1 7.6 7.7 8.3 8.2 8.3 8.5 8.1 7.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	15.1 15.3 15.0 15.4 15.4 15.4 15.0 16.6 17.2 17.2 17.2 17.0 16.9 16.5	14.2 15.0 14.7 14.8 14.5 14.1 14.8 16.6 16.5 16.7 16.1 16.1	14.6 15.1 14.9 15.1 14.5 15.4 16.9 16.9 16.5 16.2		MARCH		12.0 12.0 11.9 11.7 11.5 10.8 10.1 10.4 11.8 10.4 10.1 11.6 10.8 10.0	11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.8 9.7 9.2 8.7 10.1 9.9 9.7	11.8 11.8 11.6 11.2 10.3 10.0 10.1 10.5 9.9 9.3 10.8 10.3 9.8 9.6	8.3 8.2 8.3 7.8 7.9 8.7 8.6 8.5 8.5 8.5 8.1 7.9	MAY 8.0 8.0 8.0 7.8 7.4 7.6 7.9 8.0 8.1 8.1 7.9 7.8 7.6 7.9	8.2 8.1 8.2 8.1 7.6 7.7 8.3 8.2 8.3 8.5 8.1 7.9 7.7
1 2 3 4 5 6 7 8 9 10	15.1 15.3 15.0 15.4 15.4 15.4 15.0 16.6 17.2 17.2 17.0 16.9 16.5	14.2 15.0 14.7 14.8 14.5 14.1 14.8 16.6	14.6 15.1 14.9 15.1 14.5 15.4 16.9 16.9 16.5 16.2		MARCH		12.0 12.0 11.9 11.7 11.5 10.8 10.1 10.4 11.8 10.4	11.7 11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.7 9.2 8.7 10.1 9.9	11.8 11.8 11.6 11.2 10.3 10.0 10.1 10.5 9.9 9.3 10.8 10.3 9.8	8.3 8.2 8.3 7.8 7.9 8.7 8.6 8.5 8.5 8.5 8.2 8.1 7.9	MAY 8.0 8.0 7.8 7.4 7.6 7.9 8.1 7.9 7.8 7.9	8.2 8.1 8.2 8.1 7.6 7.7 8.3 8.2 8.3 8.5 8.1 7.9 7.7
1 2 3 4 5 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18	15.1 15.3 15.0 15.4 15.4 15.4 15.6 17.2 17.2 17.0 16.9 16.5 17.0 17.8 18.3 18.0	14.2 15.0 14.7 14.8 14.5 14.1 14.8 16.6 16.5 16.7 16.1 16.1 16.4	14.6 15.1 14.9 15.1 15.1 14.5 16.9 16.9 16.5 16.2 17.3 17.8 17.8	 11.6	MARCH	 11.4	12.0 12.0 11.9 11.7 11.5 10.8 10.1 10.4 10.1 11.6 10.8 10.0 10.0	APRIL 11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.8 9.7 9.2 8.7 10.1 9.9 9.7 9.4 9.5 10.4 10.7	11.8 11.8 11.8 11.6 11.2 10.3 10.0 10.1 10.5 9.9 9.3 10.8 10.3 9.6 10.0 10.1 10.0	8.3 8.2 8.3 7.8 7.9 8.7 8.6 8.5 8.5 9.4 8.5 8.2 8.1 7.9	MAY 8.0 8.0 8.0 7.8 7.4 7.6 7.9 8.0 8.1 8.1 7.9 7.8 7.6 7.4 7.7 7.8 7.7 7.8 7.7 7.8 7.7 7.8 7.7 7.8 7.7 7.8	8.2 8.1 8.2 8.1 7.6 7.7 8.3 8.2 8.3 8.5 8.1 7.9 7.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	15.1 15.3 15.0 15.4 15.4 15.4 15.6 17.2 17.2 17.0 16.5 17.0	14.2 15.0 14.7 14.8 14.5 14.1 14.8 16.6 16.5 16.7 16.1 16.1 16.4	14.6 15.1 14.9 15.1 15.5 15.4 16.9 16.9 16.9 16.2 16.7		MARCH		12.0 12.0 11.9 11.7 11.5 10.8 10.1 10.4 11.8 10.4 10.1 11.6 10.8 10.0 10.0	APRIL 11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.7 9.2 8.7 10.1 9.9 9.7 9.4 9.5 10.4	11.8 11.8 11.8 11.6 11.2 10.3 10.0 10.1 10.5 9.9 9.3 10.8 10.3 9.6	8.3 8.2 8.3 7.8 7.9 8.7 8.6 8.5 8.5 8.5 8.2 8.1 7.9	MAY 8.0 8.0 8.0 7.8 7.4 7.6 7.9 8.1 8.1 7.9 7.8 7.9 7.8 7.6 7.4 7.6	8.2 8.1 8.2 8.1 7.6 7.7 8.3 8.2 8.3 8.5 8.1 7.9 7.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	15.1 15.3 15.0 15.4 15.4 15.4 15.5 17.2 17.2 17.2 17.0 16.5 17.0 17.8 18.3 18.0 17.1 16.8	14.2 15.0 14.7 14.8 14.5 14.1 14.8 16.6 16.5 16.7 16.1 16.1 16.4 16.9 17.3 17.1 15.5 15.7	14.6 15.1 14.9 15.1 15.4 16.9 16.9 16.5 16.2 16.7 17.3 17.8 16.3 16.2 15.5	 11.6 11.6 11.4	MARCH	 11.4 11.3 11.2	12.0 12.0 11.9 11.7 11.5 10.8 10.1 11.6 10.8 10.0 10.0 10.0 11.1 11.0 11.0 9.7	APRIL 11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.7 9.2 8.7 10.1 9.9 9.7 9.4 9.5 10.4 10.7 9.7 9.0 8.4	11.8 11.8 11.6 11.2 10.3 10.0 10.1 10.5 9.9 9.3 10.8 10.3 9.6 10.0 10.8 10.8 10.1 9.3	8.3 8.2 8.3 7.8 7.9 8.7 8.6 8.5 8.5 8.5 8.5 8.5 8.1 7.9 7.7 7.5 7.7 8.0 8.1	MAY 8.0 8.0 8.0 7.8 7.4 7.6 7.9 8.1 8.1 7.9 7.8 7.6 7.7 7.9	8.2 8.1 7.6 7.7 8.3 8.2 8.3 8.5 8.1 7.9 7.7 7.5 7.3 7.5 7.8 7.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	15.1 15.3 15.0 15.4 15.4 15.4 15.4 15.6 17.2 17.2 17.0 16.9 16.5 17.0 17.8 18.3 18.0 17.1 16.8	14.2 15.0 14.7 14.8 14.5 14.1 14.8 16.6 16.5 16.7 16.1 16.1 16.4 16.9 17.3 17.1 15.5	14.6 15.1 14.9 15.1 15.5 15.4 16.9 16.9 16.5 16.2 17.3 17.8 17.5 16.3	 11.6 11.6 11.6	MARCH	 11.4 11.3 11.2	12.0 12.0 11.9 11.7 11.5 10.8 10.1 11.8 10.4 11.6 10.8 10.0 10.0	APRIL 11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.8 9.7 9.2 8.7 10.1 9.9 9.7 9.4 9.5 10.4 10.7 9.7 9.0	11.8 11.8 11.8 11.6 11.2 10.3 10.0 10.1 10.5 9.9 9.3 10.8 10.3 9.6 10.0 10.8 10.8 10.8	8.3 8.2 8.3 7.8 7.9 8.7 8.5 8.5 8.5 8.5 7.7 7.5 7.7 8.0 8.1	MAY 8.0 8.0 7.8 7.4 7.6 7.9 8.1 8.1 7.9 7.8 7.6 7.4 7.6 7.7	8.2 8.1 7.6 7.7 8.3 8.2 8.3 8.5 8.1 7.9 7.7 7.5 7.3 7.5 7.8 8.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	15.1 15.3 15.0 15.4 15.4 15.4 15.5 17.2 17.2 17.2 17.0 16.5 17.0 17.8 18.3 18.0 17.1 16.8	14.2 15.0 14.7 14.8 14.5 14.1 14.8 16.6 16.5 16.7 16.1 16.1 16.4 16.9 17.3 17.1 15.5 15.7	14.6 15.1 14.9 15.1 15.4 16.9 16.9 16.5 16.2 16.7 17.3 17.8 17.8 16.3 17.5 16.3 17.5 16.3	 11.6 11.6 11.4 11.7 12.2 12.5	MARCH	 11.4 11.3 11.2 11.4 11.9 12.3 12.7	12.0 12.0 11.9 11.7 11.5 10.8 10.1 11.6 10.8 10.0 10.0 10.0 11.1 11.0 9.7 9.7	APRIL 11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.7 9.2 8.7 10.1 9.9 9.7 9.4 9.5 10.4 10.7 9.7 9.0 8.4 8.0 8.1 8.7	11.8 11.8 11.6 11.2 10.3 10.0 10.1 10.5 9.9 9.3 10.8 10.3 9.6 10.0 10.8 10.1 9.3 8.7 8.3 8.7 8.3 8.7	8.3 8.2 8.3 7.8 7.9 8.7 8.6 8.5 8.5 8.5 8.5 7.9 7.7 7.5 7.7 7.5 7.7 8.0 8.1	MAY 8.0 8.0 8.0 7.8 7.4 7.6 7.9 8.1 8.1 7.9 7.8 7.6 7.7 7.9 8.5 8.9 9.0	8.2 8.1 8.2 8.1 7.6 7.7 8.3 8.2 8.3 8.5 8.1 7.9 7.7 7.5 7.3 7.5 7.8 7.9 8.3 8.7 9.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	15.1 15.3 15.0 15.4 15.4 15.4 15.6 17.2 17.2 17.0 16.9 17.8 18.3 18.0 17.1 16.9 13.9 14.6 14.2 13.7	14.2 15.0 14.7 14.8 14.5 14.1 14.8 16.6 16.7 16.1 16.1 16.4 16.9 17.3 17.1 15.5 15.7	14.6 15.1 14.9 15.1 15.5 16.9 16.9 16.5 16.5 16.5 17.3 17.8 17.5 16.3 17.5 16.3 17.5 16.3 17.5 16.3	 11.6 11.6 11.6 1	MARCH	 11.4 11.4 11	12.0 12.0 11.9 11.7 11.5 10.8 10.1 10.4 11.6 10.8 10.0 10.0 10.0 10.0 10.7 9.7 9.0 8.6 9.0 9.3 9.0	APRIL 11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.7 9.2 8.7 10.1 9.9 9.7 9.4 9.5 10.4 10.7 9.7 9.0 8.4 8.0 8.1 8.7 8.6	11.8 11.8 11.8 11.6 11.2 10.3 10.0 10.1 10.5 9.9 9.3 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8	8.3 8.2 8.3 7.8 7.9 8.7 8.6 8.5 8.5 8.5 7.7 7.7 7.7 7.7 8.0 8.1 8.1 9.1 9.2 9.4 9.5	MAY 8.0 8.0 8.0 7.8 7.4 7.6 7.9 8.1 8.1 7.9 7.8 7.6 7.7 9 8.5 8.9 9.0	8.2 8.1 8.2 8.1 7.6 7.7 8.3 8.2 8.3 8.5 8.1 7.9 7.7 7.5 7.3 7.5 7.8 7.9 8.3 8.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	15.1 15.3 15.0 15.4 15.4 15.4 15.0 16.6 17.2 17.2 17.0 16.5 17.0 17.8 18.3 18.0 17.1 16.8 16.9 13.9 14.6 14.2 13.7	14.2 15.0 14.7 14.8 14.5 14.1 14.8 16.6 16.5 16.7 16.1 16.1 16.4 16.9 17.3 17.1 15.5 15.7 13.4 13.5 13.5 13.6 13.6	14.6 15.1 14.9 15.1 14.5 16.9 16.9 16.9 16.5 16.2 16.7 17.3 17.8 17.8 17.5 16.3 16.3 17.3 16.3 17.3 16.3 17.3 16.3 17.3 17.3 17.3 17.3 17.3 17.3 17.3 17	 11.6 11.6 11.4 11.7 12.2 12.5 12.9 13.2	MARCH	 11.4 11.3 11.2 11.4 11.9 12.3 12.7 13.1	12.0 12.0 11.9 11.7 11.5 10.8 10.1 10.4 11.8 10.4 10.1 11.6 10.8 10.0 10.0 10.0 10.0 10.0 10.0 10.7 9.7 9.0 8.6 9.0 9.3 9.0	APRIL 11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.7 9.2 8.7 10.1 9.9 9.7 9.4 9.5 10.4 10.7 9.7 9.0 8.4 8.0 8.1 8.7 8.6 8.0 7.9	11.8 11.8 11.6 11.2 10.3 10.0 10.1 10.5 9.9 9.3 10.8 10.8 10.0 10.8 10.0 10.8 10.8 10.8	8.3 8.2 8.3 7.8 7.9 8.7 8.6 8.5 8.5 8.5 8.5 7.7 7.7 7.5 7.7 8.0 8.1 9.4 9.4 9.5 9.4 9.5 9.4 9.5 9.5 9.5 9.6	MAY 8.0 8.0 8.0 7.8 7.4 7.6 7.9 8.1 8.1 7.9 7.8 7.6 7.4 7.2 7.3 7.6 7.7 7.9 8.5 8.9 9.0 8.6	8.2 8.1 7.6 7.7 8.3 8.2 8.3 8.5 8.1 7.9 7.7 7.5 7.8 7.9 8.3 8.7 9.1 9.2 9.4
1 2 2 3 4 4 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	15.1 15.3 15.0 15.4 15.4 15.4 15.6 17.2 17.2 17.0 16.5 17.0 17.8 18.3 18.0 17.1 16.8	FEBRUARY 14.2 15.0 14.7 14.8 14.5 14.1 14.8 16.6 16.5 16.7 16.1 16.1 16.1 15.5 17.3 17.1 15.5 15.7	14.6 15.1 14.9 15.1 15.1 14.5 16.9 16.9 16.9 16.5 16.2 16.7 17.3 17.8 17.5 16.3 17.8 17.5 16.3 17.8 17.5 16.3 17.8 17.5 16.3 17.5 16.3 17.5 16.3 17.5 17.5 17.5 17.5 17.5 17.5 17.5 17.5	 11.6 11.6 11.6 1	MARCH	 11.4 11.4 11.3 11.2 11.4 11.9 12.3 12.7 13.1 12.9	12.0 12.0 11.9 11.7 11.5 10.8 10.1 11.6 10.4 11.6 10.8 10.0 10.0 10.0 10.0 10.7 9.7 9.0 8.6 9.0 9.3 9.0 9.3 8.7 8.3 8.4	APRIL 11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.7 9.2 8.7 10.1 9.9 9.7 9.4 9.5 10.4 10.7 9.7 9.0 8.4 8.0 8.1 8.7 8.6 8.0 7.9 7.9	11.8 11.8 11.8 11.6 11.2 10.3 10.0 10.1 10.5 9.9 9.3 10.8 10.3 9.6 10.0 10.8 10.8 10.8 10.8 10.8 10.8 10.8	8.3 8.2 8.3 7.8 7.9 8.6 8.5 8.5 8.5 8.5 8.5 7.7 7.5 7.7 8.6 8.1 9.2 9.4 9.5 9.4 9.5 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6	MAY 8.0 8.0 8.0 7.8 7.4 7.6 7.9 8.1 8.1 7.9 7.8 7.6 7.7 7.9 8.5 8.9 9.0 9.2 9.0 8.6 8.2	8.2 8.1 8.2 8.1 7.6 7.7 8.3 8.2 8.3 8.5 8.1 7.9 7.7 7.5 7.8 7.9 8.3 8.3 8.3 8.3 9.1 9.2 9.4 9.1 8.4
1 2 3 4 4 5 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	15.1 15.3 15.0 15.4 15.4 15.4 15.0 16.6 17.2 17.2 17.0 16.5 17.0 17.8 18.3 18.0 17.1 16.8 16.9 13.9 14.6 14.2 13.7	14.2 15.0 14.7 14.8 14.5 14.1 14.8 16.6 16.5 16.7 16.1 16.1 16.1 16.1 17.3 17.1 15.5 15.7 13.4 13.5 13.5 13.6 13.6	14.6 15.1 14.9 15.1 14.5 16.9 16.9 16.9 16.5 16.2 16.7 17.3 17.8 17.8 17.5 16.3 16.3 14.4 14.4 14.4 14.4 14.4	 11.6 11.6 11.4 11.7 12.2 12.5 12.9 13.2 13.3 13.2 13.0 12.8	MARCH	 11.4 11.3 11.2 11.4 11.9 12.3 12.7 13.1 13.2 13.1 12.9 12.7	12.0 12.0 11.9 11.7 11.5 10.8 10.1 11.6 10.4 11.8 10.4 11.6 10.0 10.0 10.0 10.0 10.0 10.7 9.7 9.0 8.6 9.0 9.3 9.3 9.0	APRIL 11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.7 9.2 8.7 10.1 9.9 9.7 9.4 9.5 10.4 10.7 9.0 8.4 8.0 8.0 8.1 8.7 8.6 8.0 7.9 8.0 8.0 8.0	11.8 11.8 11.8 11.6 11.2 10.3 10.0 10.1 10.5 9.9 9.3 10.8 10.8 10.0 10.8 10.1 9.3 8.7 8.3 8.5 9.6	8.3 8.2 8.3 7.8 7.9 8.7 8.5 8.5 8.5 8.5 7.7 7.7 7.5 7.7 8.1 8.6 9.1 9.2 9.4 9.5 9.3 9.4 9.5 9.3 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6	MAY 8.0 8.0 7.8 7.4 7.6 7.9 8.1 8.1 7.9 7.8 7.6 7.4 7.2 7.3 7.6 7.7 7.9 8.5 8.9 9.0 8.6 8.2 8.1 8.5	8.2 8.1 7.6 7.7 8.3 8.2 8.3 8.5 8.1 7.9 7.7 7.5 7.3 7.5 7.8 8.7 9.1 9.1 9.4 9.1 8.4 8.4
1 2 3 4 4 5 6 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	15.1 15.3 15.0 15.4 15.4 15.4 15.6 17.2 17.2 17.0 16.5 17.0 17.8 18.3 18.0 17.1 16.8 16.9 13.9 14.6 14.2 13.7	14.2 15.0 14.7 14.8 14.5 14.1 14.8 16.6 16.5 16.7 16.1 16.1 16.4 16.9 17.3 17.1 15.5 15.7	14.6 15.1 14.9 15.1 15.4 16.9 16.9 16.5 16.2 16.7 17.3 17.8 16.3 17.5 16.3 17.5 13.6 14.4 14.4 14.4 14.4	 11.6 11.6 11.4 11.7 12.2 12.5 12.9 13.2	MARCH	 11.4 11.3 11.2 11.4 11.3 11.2 11.4 11.3 11.2	12.0 12.0 11.9 11.7 11.5 10.8 10.1 11.6 10.8 10.0 10.0 10.0 10.0 10.7 9.7 9.0 8.6 9.0 9.3 9.0 9.3 9.0	APRIL 11.7 11.7 11.7 11.4 10.8 10.0 9.8 9.7 9.2 8.7 10.1 9.9 9.7 9.4 9.5 10.4 10.7 9.0 8.4 8.0 8.1 8.7 8.6	11.8 11.8 11.8 11.6 11.2 10.3 10.0 10.1 10.5 9.9 9.3 10.8 10.3 9.6 10.0 10.8 10.1 9.3 8.7 8.3 8.7 8.3 8.7	8.3 8.2 8.3 7.8 7.9 8.7 8.5 8.5 8.5 8.5 7.7 7.5 7.7 7.5 7.7 8.0 8.1 9.4 9.5 9.4 9.5 9.4 9.5 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6	MAY 8.0 8.0 7.8 7.4 7.6 7.9 8.1 8.1 7.9 7.8 7.6 7.7 7.9 8.5 8.9 9.0 9.2 9.0 8.6 8.1	8.2 8.1 8.2 8.1 7.6 7.7 8.3 8.2 8.3 8.5 8.1 7.9 7.7 7.5 7.3 7.5 7.8 7.9 9.4 9.1 8.8 8.4

06892350 KANSAS RIVER AT DESOTO, KS--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBE	R
1 2 3 4 5	9.5 9.2 9.1 9.3 9.5	9.1 8.7 8.5 8.6 8.7	9.3 9.0 8.8 8.9 9.1	7.4 7.4 7.4 7.3 7.4	7.2 7.2 7.2 7.0 7.0	7.3 7.3 7.3 7.2 7.2	9.6 11.2 10.8 11.7 10.0	7.0 7.3 7.0 7.1 7.6	8.0 9.0 8.9 9.3 8.7	8.2 8.2 8.2 8.2 7.9	7.8 7.8 7.4 7.6 7.3	8.0 8.0 7.9 7.9 7.7
6 7 8 9 10	9.3 8.9 8.5 8.6 8.7	8.7 8.1 8.0 8.3 8.4	9.0 8.6 8.3 8.5	7.4 7.1 7.0 7.6 8.8	6.9 6.8 6.6 6.7	7.1 6.9 6.8 7.0 7.4	8.7 8.7 9.2 8.1	7.4 7.8 7.2	7.9 8.4 7.6	8.5 10.1 11.8 12.8 11.8	7.3 7.5 7.7 8.3 8.3	7.8 8.4 9.4 10.3 9.9
11 12 13 14 15	8.7 8.4 8.5 8.6 8.6	8.3 8.3 8.2 8.3 8.3	8.5 8.4 8.4 8.5	9.8 8.9 9.3 9.6 10.3	6.9 7.1 6.9 7.7 7.9	8.0 7.8 8.1 8.6 8.9	8.5 8.5 9.7 10.5 10.2	7.2 7.4 7.5 7.4 7.4	7.7 7.8 8.3 8.7 8.4	11.9 11.2 10.6 11.6 10.7	8.1 7.8 7.5 7.9 7.7	9.8 9.3 9.0 9.6 9.1
16 17 18 19 20	8.4 	7.7 	e8.2 	10.5 11.4 9.8 11.3	7.7 7.7 7.1 7.1 7.2	8.9 9.3 8.3 8.8 9.2	12.7 12.0 14.7 14.9 13.2	7.3 7.6 7.8 7.9 7.6	9.7 9.5 11.2 11.3 10.2	9.2 8.2 	7.7 7.7 	8.6 8.0
21 22 23 24 25	7.2 7.2 7.3	 6.7 6.9 7.1	 6.9 7.1 7.2	12.0 11.0 9.9 12.2 12.0	6.8 6.8 6.8 7.4 7.6	9.3 8.5 8.2 9.5 9.4	12.1 12.3 12.6 8.1 7.1	6.9 6.8 6.9 5.9 6.2	9.3 9.2 9.3 6.5 6.7	8.3 8.3 8.5 8.8	8.1 8.1 8.1 8.4	8.2 8.2 8.3 8.6
26 27 28 29 30 31	7.3 7.4 7.4 7.4 7.4	7.1 7.2 7.3 7.3 7.3	7.2 7.3 7.3 7.3 7.3	10.4 11.0 11.9 10.1 8.3 7.2	7.6 7.9 7.8 7.5 7.1 6.2	8.9 9.1 9.4 8.7 7.6 6.8	7.7 7.1 7.2 7.5 7.8 8.0	6.6 6.8 6.9 7.0 6.9 7.6	7.0 6.9 7.0 7.2 7.5 7.8	8.9 9.0 9.0 9.2 9.2	8.6 8.7 8.7 8.9 9.1	8.8 8.9 8.9 9.1 9.2
MONTH YEAR	9.5 18.3	6.7 5.9	8.2 10.5	12.2	6.2	8.2	14.9	5.9	8.4	12.8	7.3	8.7

e Estimated

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 20 MIN DAY MAX MIN MEAN MAX MIN MEAN MAX MIN MEAN MAX MEAN OCTOBER NOVEMBER DECEMBER JANUARY 76 3 4 ------7 ------------15 68 56 85 ------19 22 19 25 25 23 22 ---------___ ___ ___ ---22 23 24 25 ___ 78 78 ---19 ------17 41 46 27 ------29 30 74 ---50 MONTH

06892350 KANSAS RIVER AT DESOTO, KS--Continued

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 20

TURBIDI	TY, FIEI	JD, WATE	K, UNFIL	TERED, NEP	HELOMETR	IC TURBI	DITY UNITS,	WATER	YEAR OCT	OBER 2000	TO SEPTE	MBER 20
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUAR:	Y		MARCH			APRIL			MAY	
1 2 3 4 5	77 55 37 46 38	36 22 24 22 18	56 38 30 28 29	>1383 1370 940 610 420	1320 730 530 390 360	>1378 1050 710 480 390	270 240 350 400 1050	210 200 190 200 200	240 220 250 290 330	410 310 260 240 710	290 230 200 180 230	340 270 220 210 360
6 7 8 9 10	28 32 1200 >1384 690	18 16 20 570 200	21 21 190 >1179 350	370 380 310 280 230	300 300 240 220 160	330 340 260 250 190	>1215 970 350 200 1030	900 320 190 140 150	>1176 590 250 170 280	900 580 1080 900 380	400 320 530 370 230	600 400 860 540 290
11 12 13 14 15	240 120 100 200 170	120 71 65 100 76	160 90 77 160 110	200 200 790 >1409 >1414	150 150 170 630 656	180 170 280 >1189	1220 1200 >1297 >1158 >1158	540 360 1200 820 780	990 530 >1191 >1009 >1040	250 560 630 650 610	200 250 510 570 520	220 470 560 620 560
16 17 18 19 20	100 76 56 45 40	62 42 33 29 27	77 57 40 37 33	>1180 1180 1120 640 760	1000 570 360 370	 >1169 790 460 540	>1152 >1147 560 410 320	1240 510 380 310 240	>1124 >804 440 360 270	540 460 420 400 360	440 400 360 340 310	480 430 390 360 330
21 22 23 24 25	58 90 78 1370 >1392	29 43 41 40 990	41 61 52 >446 >1301	1180 1180 710 630 460	670 560 540 390 270	890 840 600 510 360	400 1170 1170 1120 650	190 260 1100 580 410	230 >673 >973 730 500	360 360 360 330 300	320 320 300 270 250	330 340 330 290 270
26 27 28 29 30 31	>1386 >1386 >1380 	>1382 >1380 >1378 	>1384 >1383 >1379 	310 310 320 320 290 260	250 250 250 240 230 220	280 280 280 280 260 240	510 460 300 290 370	450 260 230 250 280	470 330 250 270 340	350 340 330 300 300 320	290 290 280 260 260 260	320 320 300 280 280 280
MONTH	1390	16	320	1410	150	520	1300	140	540	1080	180	380
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE	MEAN	MAX	MIN	MEAN		MIN AUGUST	MEAN	MAX	MIN SEPTEMBI	
DAY 1 2 3 4 5	MAX 400 540 1140 >1175 >1178		270 400 560 >1114 >1077	MAX 320 300 270 280 260		300 280 260 260 230			MEAN 250 140 81 81 110	MAX 1110 1070 670 360 250		
1 2 3 4	400 540 1140 >1175	JUNE 220 320 300 980	270 400 560 >1114	320 300 270 280	JULY 280 260 250 240	300 280 260 260	370 190 100 110	AUGUST 180 96 65 68	250 140 81 81	1110 1070 670 360	820 670 350 220	930 900 480 270
1 2 3 4 5 6 7 8 9	400 540 1140 >1175 >1178 >1187 >1193 >1192 850 890 790 800	JUNE 220 320 300 980 740 770 1150 810 540 590 600 710	270 400 560 >1114 >1077 >1106 >1184 >1106 660	320 300 270 280 260 240 240 220 190 210	JULY 280 260 250 240 210 200 210 180 140 97 89 110	300 280 260 230 230 220 230 200 160 130	370 190 100 110 150 210 240 250 220 200	180 96 65 68 84 120 190 180 170 170	250 140 81 81 110 170 220 220 190 180	1110 1070 670 360 250 260 190 150 130 100	820 670 350 220 220 170 120 110 80 39	930 900 480 270 240 210 150 130 100
1 2 3 4 5 6 7 8 9 10 11 12 13 14	400 540 1140 >1175 >1178 >1187 >1187 >1192 850 890 790 800 750 700	JUNE 220 320 300 980 740 770 1150 810 540 590 600 710 660 580	270 400 560 >1114 >1077 >1106 >1184 >1106 660 720 690 750 710 630	320 300 270 280 260 240 220 190 210 180 810 1090 280	JULY 280 260 250 240 210 200 210 180 140 97 89 110 250 150	300 280 260 230 220 230 200 160 130 120 180 490 200	370 190 100 110 150 210 240 250 220 200 250 270 230 210	AUGUST 180 96 65 68 84 120 190 180 170 170 190 220 180 160	250 140 81 81 110 170 220 190 180 210 240 210 180	1110 1070 670 360 250 260 190 150 130 100 70 86 130	820 670 350 220 220 170 120 110 80 39 34 33 31 35	930 900 480 270 240 210 150 130 100 66 58 56 53 82
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	400 1140 >1175 >1178 >1187 >1193 >1193 >190 850 890 750 700 640 610 550 850 81150	JUNE 220 320 300 980 740 770 1150 810 540 590 600 710 660 530 520 470 470 570	270 400 560 >1114 >1077 >1106 >1184 >1106 660 720 690 750 710 630 580 570 500 541 810	320 300 270 280 260 240 240 220 190 210 180 810 1090 280 170	JULY 280 260 250 240 210 200 210 180 140 97 89 110 250 130 160 150 170 150	300 280 260 230 220 230 200 160 130 120 180 490 200 140 170 180 180	370 190 100 110 150 210 240 250 220 200 250 270 230 210 170	AUGUST 180 96 65 68 84 120 190 170 170 190 220 180 160 120 92 69 68 87 71	250 140 81 81 110 170 220 190 180 210 240 210 180 140	1110 1070 670 360 250 260 190 150 130 100 70 86 130 110 >1198 >1201 >1203 >1204	820 670 350 220 220 170 120 110 80 39 34 33 31 35 92 100 800 800 >1200	930 900 480 270 240 210 150 130 66 58 56 53 82 100 >532 >1133 >1202
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	400 1140 >1175 >1178 >1187 >1192 850 890 790 800 750 700 640 610 550 1150 >1225 >1227 >1231 >1231 >700	JUNE 220 320 300 980 740 770 1150 810 540 590 600 710 660 580 530 520 470 470 640 1190 >1224 730 490	270 400 560 >1114 >1077 >1106 >1184 >1106 600 720 690 750 710 630 580 570 500 540 810 >1011 >1223 >1227 >1020 660	320 300 270 280 260 240 240 220 190 210 180 810 290 170 190 200 210 210 590 400 180 210	JULY 280 260 250 240 210 200 210 180 140 97 89 110 250 130 150 170 150 150 140 130 97	300 280 260 230 220 230 200 160 130 120 180 490 200 140 170 180 300 220 150 160 110	370 190 100 110 150 240 250 220 200 250 270 230 210 170 130 99 110 110 81	AUGUST 180 96 65 68 84 120 190 170 170 190 220 180 160 120 92 69 68 871 63 51 34 34 110	250 140 81 81 110 170 220 190 180 210 240 210 180 140 110 83 85 89 71	1110 1070 670 360 250 260 190 150 130 100 70 86 130 110 >1198 >1201 >1203 >1204 >1206	820 670 350 220 220 170 120 110 80 39 34 33 31 35 92 100 800 >1200 590 420 500 510	930 900 480 270 240 210 150 130 66 58 56 53 82 100 >532 >1133 >1202 >817 500 580 700 >174
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	400 1140 1140 1175 1178 1187 1193 850 890 790 800 750 640 610 550 81225 1227 1231 1231 970 520 460 450 390 340	JUNE 220 320 300 980 740 770 1150 810 540 590 600 710 660 580 530 520 470 470 470 470 470 400 >1224 730 490 460 430 420 370 320 300	270 400 560 >1114 >1077 >1106 >1184 >1106 660 720 690 750 710 630 580 570 500 540 810 >1011 >1223 >1227 >1020 660 480 480 480 440 410 360 320	320 300 270 280 260 240 220 190 210 180 810 1090 280 170 190 220 210 210 210 210 210 210 210 210 21	JULY 280 260 250 240 210 200 210 180 140 97 89 110 250 150 130 160 150 170 150 140 130 130 97 91 86 80 87 160 210	300 280 260 230 220 230 200 160 130 120 180 490 200 140 170 180 300 220 150 160 110 97	370 190 100 110 150 210 240 250 220 200 250 270 230 210 170 130 99 110 110 81 72 62 130 560 730 570 1060 >1237 >1231 1040	AUGUST 180 96 65 68 84 120 190 180 170 170 190 220 180 69 68 71 63 51 34 34 110 300 340 420 1020 850 850	250 140 81 81 110 170 220 220 190 180 210 240 210 180 140 110 83 85 71 62 49 59 380 460 400 780 >1194 >1075 950	1110 1070 670 360 250 260 190 150 130 100 70 86 130 110 >1198 >1201 >1203 >1204 >1206 650 1190 650 1190 640 380 340 270 250	820 670 350 220 220 170 120 110 80 39 34 33 31 35 92 100 800 800 >1200 590 420 500 510 1160 630	930 900 480 270 240 150 130 100 66 58 56 53 82 100 >532 >1135 >1135 >1202 >817 500 580 700 >1174 860 470 340 290 240

06892440 CEDAR CREEK AT HIGHWAY 56 AT OLATHE, KS

LOCATION.--Lat 38°51'33", long 94°51'14", in SE $^{1}/_{4}$ NE $^{1}/_{4}$ Sec $^{1}/_{4}$ sec.4, T.14 S., R.23 E., Johnson County, Hydrologic Unit 10300101, on right upstream side of old Highway 56 bridge, 2 mi west of Olathe.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--13.3 mi².

AC-FT

268

349

46

292

1430

PERIOD OF RECORD .-- October 2000 to September 2001.

GAGE.--Water-stage recorder. Datum of gage is 955.00 ft above sea level.

REMARKS.--Records fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY FEB OCT NOV DEC JAN MAY JUL AUG .00 7.0 1.2 . 41 4.7 13 4.1 147 3.7 4.1 7.8 15 1 1.1 2.5 .00 6.5 .28 23 3.3 1.5 84 13 .68 20 12 33 17 3 .00 2.3 59 .37 24 99 120 1.8 9.4 1.8 29 10 .59 .39 11 484 1.9 4 .00 1.6 3.1 .48 7.2 9.7 42 6.7 11 6 .91 80 .64 1.2 8.3 6.5 9.9 172 1.8 23 1.6 5.0 .27 15 .63 1.5 1.5 7.9 4.2 12 28 20 1.2 2.3 20 9 2 8 .16 1.4 84 4.1 4.6 .80 3.9 40 1.2 7.5 3.3 17 9.0 1.6 .09 136 3.0 .62 2.3 30 10 .05 1.2 13 31 7.9 14 34 2.6 15 .73 11 .07 4.4 1.8 8.9 7.3 27 9.9 10 70 2.4 20 2.7 2.3 9.8 27 7.8 5.7 4.1 2.3 7.8 6.7 16 7.1 1.5 12 .20 .50 7.2 19 13 6.6 24 .19 .65 14 8.1 2.4 .64 13 48 7.9 11 2.0 6.7 3.0 29 4.0 15 14 3.6 .64 13 97 44 2.5 8.6 3.9 2.5 25 2.1 .81 1.9 81 8.9 5.7 3.2 33 16 2.0 1.8 3.7 4.4 17 18 1.9 .89 1.4 5.1 20 12 5.9 3.5 e52 258 1.1 100 4.8 .83 26 2.5 .76 .93 9.5 11 19 1.8 4.3 5.1 1.6 62 20 1.0 1.7 .75 .58 3.7 8.2 3.8 8.4 341 1.9 1.2 29 21 .85 3.4 3.5 89 1.5 28 16 1.8 .64 .65 .66 6.8 5.0 2.1 6.5 6.4 23 16 3.7 15 22 7.5 2.4 .91 27 23 68 5.6 .80 36 251 25 2.6 1.1 .47 .48 37 6.5 1.3 4.4 10 .92 83 28 26 2.2 .84 .60 .62 16 1.4 3.2 17 23 4.7 27 1.3 .74 .81 .72 .68 .51 15 4.0 7.8 1.3 3.2 6.8 15 20 28 3.1 12 16 24 36 72 19 29 5.1 .90 .69 1.4 4.7 11 9.3 12 26 1.1 ___ 21 5.4 4.2 30 1.5 .54 5.0 1.1 10 117 26 31 .45 8.2 4.1 46 TOTAL 134 93 175 89 23 10 147 21 722 5 437 8 242 7 430 5 1718.9 233 00 453 3 1005 4 4.35 5.86 .75 14.1 8.09 13.9 33.5 MEAN 7.52 MAX 68 80 1.6 72 251 97 44 100 484 70 117 258 1.1 9.4 26 4.0 MIN .00 .74 .45 .28 1.5 1.1 3.6 .62 1.2 2.0 .66 4.6 11 4.1

868

481

854

3410

462

899

1990

06892440 CEDAR CREEK AT HIGHWAY 56 AT OLATHE, KS--Continued

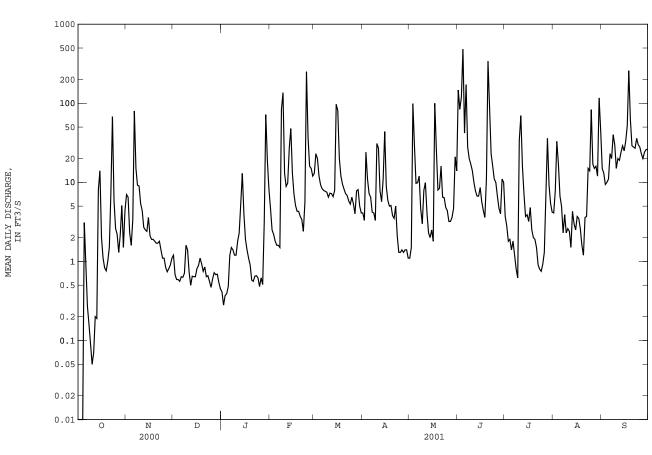
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4.35	5.86	.75	4.75	25.8	14.1	8.09	13.9	57.3	7.52	14.6	33.5
MAX	4.35	5.86	.75	4.75	25.8	14.1	8.09	13.9	57.3	7.52	14.6	33.5
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
MIN	4.35	5.86	.75	4.75	25.8	14.1	8.09	13.9	57.3	7.52	14.6	33.5
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS

FOR 2001 WATER YEAR

ANNUAL TOTAL	5725.23		
ANNUAL MEAN	15.7		
HIGHEST DAILY MEAN	484	Jun	4
LOWEST DAILY MEAN	.00	Oct	1
ANNUAL SEVEN-DAY MINIMUM	.15	Oct	7
MAXIMUM PEAK FLOW	1870	Jun	4
MAXIMUM PEAK STAGE	66.03	Jun	4
INSTANTANEOUS LOW FLOW	.00	Oct	1
ANNUAL RUNOFF (AC-FT)	11360		
10 PERCENT EXCEEDS	30		
50 PERCENT EXCEEDS	4.3		
90 PERCENT EXCEEDS	.64		



06892440 CEDAR CREEK AT HIGHWAY 56 AT OLATHE, KS--Continued

WATER-OUALITY RECORDS

PERIOD OF RECORD. -- October 2000 to September 2001.

PERIOD OF DAILY RECORD. --

SPECIFIC CONDUCTANCE: October 2000 to September 2001. pH: October 2000 to September 2001. water Temperature: October 2000 to September 2001. DISSOLVED OXYGEN: October 2000 to September 2001. TURBIDITY: October 2000s to September 2001.

INSTRUMENTATION. -- Multiparameter water-quality monitor.

REMARKS.--Records fair. Interruptions in record are due to ice conditions or malfunction of the recording instrument or sensors. Instruments used to measure turbidity conform to ISO 7027 standards.

EXTREMES FOR PERIOD OF RECORD .--

SPECIFIC CONDUCTANCE: Maximum, 1,660 microsiemens/cm, Mar. 14, 2001; minimum, 99 microsiemens/cm, June 1, 2001. pH: Maximum, 8.7 standard units, Aug. 3, 2000; minimum, 7.2 standard units, May 2, 2001. WATER TEMPERATURE: Maximum, 33.3 °C, July 22, 2001; minimum, 0.5 °C, Feb. 28, 2001. DISSOLVED OXYGEN: Maximum 18.4 mg/L, Oct. 9, 2001; minimum, 6.2 mg/L, Sept. 8, 2001. TURBIDITY: Maximum, >1,400 NTU, June 1, 2001; minimum, <2.0 NTU, Oct. 22, 2000.

EXTREMES FOR CURRENT YEAR.-SPECIFIC CONDUCTANCE: Maximum, 1,660 microsiemens/cm, Mar. 14; minimum, 99 microsiemens/cm, June 1.
pH: Maximum, 8.7 stnadard units, Aug. 3; minimum, 7.2 stnadard units, May 2.
WATER TEMPERATURE: Maximum, 33.3°C, July 22; minimum, 0.5°C, Feb. 28.
DISSOLVED OXYGEN: Maximum, 16.5 mg/L, Apr. 2; minimum, 1.9 mg/L, Aug. 17.
TURBIDITY: Maximum, >1,400 ntu, June 1; minimum, <2.0 ntu, Oct. 22.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		NO	OVEMBER		DE	ECEMBER			JANUARY	
1	681	665	672	927	646	752						
2	693	675	685	738	610	664						
3	705	685	697	985	712	894						
4	707	704	706	932	877	904						
5	1180	506	738	948	814	928						
6	1070	665	730	814	367	554						
7	665	650	657	529	462	488						
8	658	645	652	812	529	604						
9	657	651	654	817	586	652						
10	659	654	657	794	662	686						
11	666	658	662	683	631	670						
12	672	655	664	729	671	704						
13	664	659	662	891	729	799						
14	674	563	655	934	891	927						
15	626	535	554	928	894	916						
16	541	535	537	898	731	829						
17	544	539	541	731	699	706						
18	548	544	546	706	701	704						
19	551	547	549	705	702	703						
20	555	551	553	707	703	704						
21	558	554	555	708	703	704						
22	630	558	580	705	703	704						
23	741	429	505	706	700	703						
24	454	437	444	700	696	699						
25	735	448	584	698	695	697						
26	663	587	614	699	693	697						
27	607	578	591	698	691	695						
28	633	585	600	696	681	692						
29	685	614	659	696	693	695						
30	614	587	597									
31	646	528	578									
MONTH	1180	429	615	985	367	727						

06892440 CEDAR CREEK AT HIGHWAY 56 AT OLATHE, KS--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SI	PECIFIC	CONDUCTA	IVCD (FIEC	LKOSIEMENS/	CIT III 23	, peg. c,,	, WAIER IE.	AR OCTOL	DER 2000	TO DEFIEM	JER ZUUI	
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1				992	811	868	955	908	925	909	852	889
2				1130	636	1000	939	906	916	854	830	845
3 4				728 806	593 728	664 767	965 767	681 712	835 729	861 592	520 496	788 526
5				901	806	840	771	710	734	697	592	678
6				947	901	937	931	760	808	679	537	653
7				952	927	938	909	768	796	955	510	633
8 9				1190 1460	932 993	952 1230	816 771	767 739	787 759	979 784	647 644	753 720
10				1570	1050	1300	810	679	774	783	558	681
11				1170	1020	1100	768	632	681	698	548	620
12				1170	967	1020	849	731 713	792	770	698 755	736
13 14				1660 1660	1170 1220	1400 1450	732 779	546	722 738	787 793	770	767 782
15				1540	635	954	673	579	637	887	792	823
16				784	637	709	702	672	686	969	887	926
17				908	784	861	761	690	708	991	262	799
18 19				870 874	817 849	841 865	795 809	706 759	759 780	846 846	476 697	596 740
20				933	874	900	848	751	779	724	642	668
21				963	847	906	835	771	787	665	531	574
22				894	863	883	821	754	791	702	611	675
23 24				917 907	845 833	898 860	788 830	759 784	774 798	916 1160	702 844	785 1020
25				973	895	915	1020	812	861	1120	1020	1060
26				1010	886	971	1060	914	1010	1090	1020	1040
27	898	733	812	1050	1000	1020	994	911	956	1110	1050	1090
28 29	887	776 	829 	1020 956	881 931	962 946	923 928	877 892	905 909	1050 992	992 939	1020 972
30				935	893	913	930	882	906	940	593	817
31				924	897	909				724	556	597
MONTH	898	733	820	1660	593	961	1060	546	801	1160	262	783
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE	MEAN	MAX		MEAN			MEAN	MAX		
		JUNE			JULY			AUGUST			SEPTEMBE	IR.
1	690	JUNE 99	572	650	JULY 427	525	1200	AUGUST	1160	547	SEPTEMBE 524	ER 537
1 2 3	690 472 508	JUNE 99 341 348	572 409 445	650 712 687	JULY 427 650 556	525 685 630	1200 1410 1400	AUGUST 1140 1090 395	1160 1220 1140	547 580 621	SEPTEMBE 524 546 580	537 558 600
1 2 3 4	690 472 508 441	JUNE 99 341 348 193	572 409 445 307	650 712 687 619	JULY 427 650 556 604	525 685 630 611	1200 1410 1400 436	1140 1090 395 395	1160 1220 1140 414	547 580 621 623	524 546 580 596	537 558 600 614
1 2 3 4 5	690 472 508 441 548	JUNE 99 341 348 193 369	572 409 445 307 460	650 712 687 619 675	JULY 427 650 556 604 619	525 685 630 611 650	1200 1410 1400 436 483	1140 1090 395 395 436	1160 1220 1140 414 464	547 580 621 623 603	524 546 580 596 597	537 558 600 614 600
1 2 3 4 5	690 472 508 441 548	JUNE 99 341 348 193 369	572 409 445 307 460	650 712 687 619 675	JULY 427 650 556 604 619 675	525 685 630 611 650	1200 1410 1400 436 483	AUGUST 1140 1090 395 395 436 480	1160 1220 1140 414 464	547 580 621 623 603	524 546 580 596 597 595	537 558 600 614 600
1 2 3 4 5	690 472 508 441 548	JUNE 99 341 348 193 369	572 409 445 307 460	650 712 687 619 675	JULY 427 650 556 604 619	525 685 630 611 650	1200 1410 1400 436 483	1140 1090 395 395 436	1160 1220 1140 414 464	547 580 621 623 603	524 546 580 596 597	537 558 600 614 600
1 2 3 4 5 6 7 8	690 472 508 441 548 548 618 742 696	JUNE 99 341 348 193 369 264 424 608 614	572 409 445 307 460 356 499 660 654	650 712 687 619 675 790 759 702 667	JULY 427 650 556 604 619 675 702 667 636	525 685 630 611 650 724 736 684 656	1200 1410 1400 436 483 495 496 496 495	1140 1090 395 395 436 480 489 489	1160 1220 1140 414 464 489 492 492 492	547 580 621 623 603 805 640 618 604	524 546 580 596 597 595 506 459 531	537 558 600 614 600 674 542 528 562
1 2 3 4 5	690 472 508 441 548 548 618 742 696 762	JUNE 99 341 348 193 369 264 424 608 614 696	572 409 445 307 460 356 499 660 654 733	650 712 687 619 675 790 759 702 667 638	JULY 427 650 556 604 619 675 702 667 636 387	525 685 630 611 650 724 736 684 656 467	1200 1410 1400 436 483 495 496 496 495 513	1140 1090 395 395 436 480 489 489 487 488	1160 1220 1140 414 464 489 492 492 492 504	547 580 621 623 603 805 640 618 604 531	524 546 580 596 597 595 506 459 531 510	537 558 600 614 600 674 542 528 562 518
1 2 3 4 5 6 7 8 9 10	690 472 508 441 548 548 618 742 696 762	JUNE 99 341 348 193 369 264 424 608 614 696 762	572 409 445 307 460 356 499 660 654 733	650 712 687 619 675 790 759 702 667 638	JULY 427 650 556 604 619 675 702 667 636 387 381	525 685 630 611 650 724 736 684 656 467	1200 1410 1410 436 483 495 496 495 513	1140 1090 395 395 436 480 489 487 488 513	1160 1220 1140 414 464 489 492 492 492 504	547 580 621 623 603 805 640 618 604 531	524 546 580 596 597 595 506 459 531 510 496	537 558 600 614 600 674 542 528 562 518
1 2 3 4 5 6 7 8 9 10	690 472 508 441 548 548 618 742 696 762	JUNE 99 341 348 193 369 264 424 608 614 696	572 409 445 307 460 356 499 660 654 733	650 712 687 619 675 790 759 702 667 638	JULY 427 650 556 604 619 675 702 667 636 387	525 685 630 611 650 724 736 684 656 467	1200 1410 1400 436 483 495 496 496 495 513	1140 1090 395 395 436 480 489 489 487 488	1160 1220 1140 414 464 489 492 492 492 504	547 580 621 623 603 805 640 618 604 531	524 546 580 596 597 595 506 459 531 510	537 558 600 614 600 674 542 528 562 518
1 2 3 4 5 6 7 8 9 10 11 12 13 14	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555 570	572 409 445 307 460 356 499 660 654 733 945 800 677 626	650 712 687 619 675 790 759 702 667 638 530 501 563 563	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501 541	525 685 630 611 650 724 736 684 656 467 433 465 532 552	1200 1410 1410 436 483 495 496 495 513 526 539 547 546	1140 1090 395 395 436 480 489 487 488 513 523 536 543	1160 1220 1140 414 464 489 492 492 504 520 531 541	547 580 621 623 603 805 640 618 604 531 536 682 897	524 546 580 596 597 595 506 459 531 510 496 536 682 897	537 558 600 614 600 674 542 528 562 518 509 595 793 944
1 2 3 4 5 6 7 8 9 10	690 472 508 441 548 548 618 742 696 762 1120 1090 882	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555	572 409 445 307 460 356 499 660 654 733 945 800 677	650 712 687 619 675 790 759 702 667 638 530 501 563	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501	525 685 630 611 650 724 736 684 656 467 433 465 532	1200 1410 1400 436 483 495 496 496 495 513 526 539 547	1140 1090 395 436 480 489 489 487 488 513 523 536	1160 1220 1140 414 464 489 492 492 504 531 541	547 580 621 623 603 805 640 618 604 531 536 682 897	524 546 580 596 597 595 506 459 531 510 496 536 682	537 558 600 614 600 674 542 528 562 518 509 595
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740 768	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555 570 549	572 409 445 307 460 356 499 660 654 733 945 800 677 626 623	650 712 687 619 675 790 759 702 667 638 530 501 563 567 689	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501 541 567	525 685 630 611 650 724 736 684 656 467 433 465 532 552 651	1200 1410 1410 436 483 495 496 495 513 526 539 547 546 546	1140 1090 395 395 436 480 489 487 488 513 523 536 543 538	1160 1220 1140 414 464 489 492 492 504 520 531 541 544 542	547 580 621 623 603 805 640 618 604 531 536 682 897 1010 1060	524 546 580 596 597 595 506 459 531 510 496 536 682 897 1010	537 558 600 614 600 674 542 528 562 518 509 595 793 944 1040
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740 768	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555 570 549	572 409 445 307 460 356 499 660 654 733 945 800 677 626 623	650 712 687 619 675 790 759 702 667 638 530 501 563 567 689	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501 541 567	525 685 630 611 650 724 736 684 656 467 433 465 532 552 651	1200 1410 1400 436 483 495 496 496 495 513 526 539 547 546 546	1140 1090 395 395 436 480 489 487 488 513 523 536 543 538	1160 1220 1140 414 464 489 492 492 504 520 531 541 544 542	547 580 621 623 603 805 640 618 604 531 536 682 897 1010 1060	524 546 580 596 597 595 506 459 531 510 496 536 682 897 1010	537 558 600 614 600 674 542 525 518 509 595 793 944 1040
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740 768 652 693 750 768	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555 570 549	572 409 445 307 460 356 499 660 654 733 945 800 677 626 623 612 671 724 709	650 712 687 619 675 790 759 702 667 638 530 501 563 567 689	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501 541 567	525 685 630 611 650 724 736 684 656 467 433 465 532 552 651	1200 1410 1410 436 483 495 496 495 513 526 539 547 546 546	1140 1090 395 395 436 480 489 487 488 513 523 536 543 538	1160 1220 1140 414 464 489 492 492 504 520 531 541 544 542	547 580 621 623 603 805 640 618 604 531 536 682 897 1010 1060	\$24	537 558 600 614 600 674 542 528 562 518 509 595 793 944 1040
1 2 3 4 5 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740 768	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555 570 549 554 651 677	572 409 445 307 460 356 499 660 654 733 945 800 677 626 623 612 671 724	650 712 687 619 675 790 759 702 667 638 530 501 563 567 689 739 873 961	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501 541 567 689 713 873	525 685 630 611 650 724 736 684 656 467 433 465 532 552 651 723 771 910	1200 1410 1400 436 483 495 496 496 499 513 526 539 547 546 546 549 549	1140 1090 395 395 436 480 489 487 488 513 523 536 543 533 540 534	1160 1220 1140 414 464 489 492 492 492 504 520 531 541 544 542 545	547 580 621 623 603 805 640 618 604 531 536 682 897 1010 1060	524 546 580 596 597 595 506 459 531 510 496 682 897 1010 869 424 400	537 558 600 614 600 674 542 528 562 518 509 595 793 944 1040
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740 768 652 693 750 768 728	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555 570 549 554 651 677 574 253	572 409 445 307 460 356 499 660 654 733 945 800 677 626 623 612 671 724 709 339	650 712 687 619 675 790 759 702 667 638 530 501 563 567 689 739 873 961 1220 1260	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501 541 567 689 713 873 961 1180	525 685 630 611 650 724 736 684 656 467 433 465 532 552 651 723 771 910 1080 1240	1200 1410 1410 436 483 495 496 495 513 526 539 547 546 546 549 549 541 538 530	1140 1090 395 395 436 480 489 487 488 513 533 536 543 538 540 534 521 516	1160 1220 1140 414 464 489 492 492 504 520 531 541 544 542 545 544 537 529 523	547 580 621 623 603 805 640 618 604 531 536 682 897 1010 1060 869 499 514 668	\$24	537 558 600 614 600 674 542 528 562 518 509 595 793 944 1040 1020 523 434 450 590
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740 768 652 693 750 768 728	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555 570 549 554 651 677 574 253 287 328	572 409 445 307 460 356 499 660 654 733 945 800 671 724 709 339 371 341	650 712 687 619 675 790 759 702 667 638 530 501 563 567 689 739 873 961 1220 1260	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501 541 567 689 713 873 873 873 873 1180	525 685 630 611 650 724 736 684 656 467 433 465 532 552 651 723 771 910 1080 1240 1230	1200 1410 1400 436 483 495 496 495 513 526 539 547 546 546 549 541 538 530 542 545	1140 1090 395 395 436 480 489 487 488 513 523 536 543 538 540 534 529 521 516	1160 1220 1140 414 464 489 492 492 504 520 531 541 542 544 537 529 523	547 580 621 623 603 805 640 618 604 531 536 682 897 1010 1060 1060 869 499 514 668	\$24	537 558 600 614 600 674 542 528 562 518 509 595 793 944 1040 1020 523 434 450 590 750 998
1 2 3 4 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 23 24	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740 768 652 693 750 768 728 558 363 392 413	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555 570 549 554 651 677 574 253 287 328 363 392	572 409 445 307 460 356 499 660 654 733 945 800 677 626 623 612 671 724 709 339 371 341 374 402	650 712 687 619 675 790 759 702 667 638 530 501 563 567 689 739 873 961 1220 1260 1240 1230 1160	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501 541 567 689 713 873 961 1180 1180 1220 1140 1150	525 685 630 611 650 724 736 684 656 467 433 465 532 552 651 723 771 910 1080 1240 1230 1190 1160	1200 1410 1400 436 483 495 496 495 513 526 539 547 546 546 549 549 549 541 538 530	1140 1090 395 395 436 480 489 487 488 513 523 536 543 538 540 534 521 516 511 534 433 455	1160 1220 1140 414 464 489 492 492 504 520 531 541 544 542 545 544 537 529 523 529 538 538 546	547 580 621 623 603 805 640 618 604 531 536 682 897 1010 1060 869 499 514 668 789 1190 1210 732	\$24	537 558 600 614 600 674 542 528 562 518 509 595 793 944 1040 1020 523 434 450 590 750 998 960 727
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740 768 652 693 750 768 728 588 363 392	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555 570 549 554 651 677 574 253 287 328 363	572 409 445 307 460 356 499 660 654 733 945 800 677 626 623 612 671 724 709 339 371 341 374	650 712 687 619 675 790 759 702 667 638 530 501 563 567 689 739 873 961 1220 1260 1240 1230	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501 541 567 689 713 873 961 1180 1180 1180 1220 1140	525 685 630 611 650 724 736 684 656 467 433 465 532 552 651 723 771 910 1080 1240 1240 1240 1240	1200 1410 1400 436 483 495 496 496 495 513 526 539 547 546 549 541 538 530 542 545 666	1140 1090 395 395 436 489 489 487 488 513 523 536 543 534 529 521 516 511	1160 1220 1140 414 464 489 492 492 504 520 531 541 544 542 545 544 529 523	547 580 621 623 603 805 640 618 604 531 536 682 897 1010 1060 1060 499 514 668 789 1190 1210	524 546 580 596 597 595 506 459 531 510 496 536 682 897 1010 869 424 400 406 514	537 558 600 614 600 674 542 523 562 518 509 595 793 944 1040 1020 523 434 450 590
1 2 3 4 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740 768 652 693 750 768 728 558 363 392 413 439	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555 570 549 554 651 677 574 253 287 328 363 392 413 439	572 409 445 307 460 356 499 660 654 733 945 800 677 626 623 612 671 724 709 339 371 341 374 402 424	650 712 687 619 675 790 759 702 667 638 530 501 563 567 689 739 873 961 1220 1260 1240 1230 1160 1170	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501 541 567 689 713 873 961 1180 1180 1120 1140 1150 1160	525 685 630 611 650 724 736 684 656 467 433 465 532 552 651 723 771 910 1080 1240 1230 1190 1160 1160	1200 1410 1400 436 483 495 496 495 513 526 539 547 546 546 549 549 541 538 530 542 545 666 542 522	1140 1090 395 395 436 480 489 487 488 513 523 536 543 538 540 534 521 516 511 534 435 405	1160 1220 1140 414 464 489 492 492 504 520 531 541 544 542 545 544 529 523 529 538 6450	547 580 621 623 603 805 640 618 604 531 536 682 897 1010 1060 869 499 499 514 668 789 1190 732 746	\$\text{SEPTEMBE}\$ \text{524} \\ 546 \\ 580 \\ 596 \\ 597 \\ 595 \\ 506 \\ 459 \\ 531 \\ 510 \\ 496 \\ 536 \\ 682 \\ 897 \\ 1010 \\ 869 \\ 424 \\ 400 \\ 406 \\ 514 \\ 668 \\ 733 \\ 721 \\ 726 \\ 746 \\ 746	537 558 600 614 600 674 542 528 562 518 509 595 793 944 1040 1020 523 434 450 590 750 998 960 727 733
1 2 3 4 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740 768 652 693 7508 768 728 558 363 392 413 439	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 5570 549 554 651 677 574 253 287 328 363 392 413 439 771	572 409 445 307 460 356 499 660 654 733 945 800 677 626 623 612 671 724 407 339 371 341 374 402 424	650 712 687 619 675 790 759 702 667 638 530 501 563 567 689 739 873 961 1220 1260 1240 1230 1160 1170	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501 541 567 689 713 873 961 1180 1180 1180 1150 1160 1170 880	525 685 630 611 650 724 736 684 656 467 433 465 532 552 651 723 771 910 1080 1240 1230 1190 1160 1160	1200 1410 1410 436 483 495 496 495 513 526 539 547 546 546 549 541 538 530 542 545 666 542 542 542 542	1140 1090 395 395 436 480 489 487 488 513 523 536 543 538 540 534 529 521 516 511 521 516 543 521 521 521 521 521 521 521 521 521 521	1160 1220 1140 414 464 489 492 492 504 520 531 541 542 545 544 537 529 523 529 538 530 486 450	547 580 621 623 603 805 640 618 604 531 536 682 897 1010 1060 1060 869 499 514 668 789 1190 1210 732 746	\$\text{SEPTEMBE}\$ \text{524} & 546 & 580 & 596 & 597 \\ \text{595} & 506 & 459 & 531 & 510 & 496 & 536 & 682 & 897 & 1010 & 869 & 424 & 400 & 406 & 514 & 668 & 733 & 721 & 721 & 726 & 746 & 777 & 746 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 777 & 7	537 558 600 614 600 674 542 528 562 518 509 595 793 944 1040 1020 523 434 450 590 750 998 960 727 733 761 793
1 2 3 4 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740 768 652 693 750 768 728 558 363 392 413 439	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555 570 549 554 651 677 574 253 287 328 363 392 413 439	572 409 445 307 460 356 499 660 654 733 945 800 677 626 623 612 671 724 709 339 371 341 374 402 424	650 712 687 619 675 790 759 702 667 638 530 501 563 567 689 739 873 961 1220 1260 1240 1230 1160 1170	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501 541 567 689 713 873 961 1180 1180 1120 1140 1150 1160	525 685 630 611 650 724 736 684 656 467 433 465 532 552 651 723 771 910 1080 1240 1230 1160 1160 1160 1180 1080 669	1200 1410 1400 436 483 495 496 495 513 526 539 547 546 546 549 549 541 538 530 542 545 666 542 522	1140 1090 395 395 436 480 489 487 488 513 536 543 538 540 534 521 516 511 534 433 455 405	1160 1220 1140 414 464 489 492 492 504 520 531 541 544 542 545 544 529 523 529 538 6450	547 580 621 623 603 805 640 618 604 531 536 682 897 1010 1060 869 499 499 514 668 789 1190 732 746	\$\text{SEPTEMBE}\$ \text{524} \\ 546 \\ 580 \\ 596 \\ 597 \\ 595 \\ 506 \\ 459 \\ 531 \\ 510 \\ 496 \\ 536 \\ 682 \\ 897 \\ 1010 \\ 869 \\ 424 \\ 400 \\ 406 \\ 514 \\ 668 \\ 733 \\ 721 \\ 726 \\ 746 \\ 746	537 558 600 614 600 674 542 528 562 518 509 595 793 944 1040 1020 523 434 450 590 750 998 960 727 733
1 2 3 4 4 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740 768 652 693 750 768 728 363 392 413 439 787 802 806 1140 497	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555 570 549 554 651 677 574 253 287 328 363 392 413 439 771 768 461 390	572 409 445 307 460 356 499 660 654 733 945 800 677 626 623 612 671 729 339 371 341 374 402 424 620 793 782 801 433	650 712 687 619 675 790 759 702 667 638 530 501 563 567 689 739 873 961 1220 1260 1240 1230 1160 1170	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501 541 567 689 713 873 961 1180 1180 1180 1150 1160 1170 880 574 661	525 685 630 611 650 724 736 684 656 467 433 465 532 552 651 723 771 910 1080 1240 1230 1190 1160 1160 1180 696 669 672	1200 1410 1410 436 483 495 496 495 513 526 539 547 546 546 549 549 541 538 530 542 545 666 542 542 542 542 542 542 542 542 542 542	1140 1090 395 395 436 480 489 487 488 513 523 536 543 534 529 515 511 521 516 511 534 435 405 435 405	1160 1220 1140 414 464 489 492 492 504 520 531 541 542 545 544 537 529 523 529 538 530 486 450 444 463 667 908 958	547 580 621 623 603 805 640 618 604 531 536 682 897 1010 1060 1060 869 499 514 668 789 1190 1210 732 746	\$24	537 558 600 614 600 674 542 528 562 518 509 595 793 944 1040 1020 523 434 450 590 750 998 960 727 733 761 793 824 858 876
1 2 3 4 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740 768 652 693 758 363 392 413 439 787 806 1140	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555 570 549 554 651 677 574 253 287 328 363 392 413 439 771 768 461	572 409 445 307 460 356 499 660 654 733 945 800 677 626 623 612 671 724 709 339 371 341 374 402 424 620 793 782 801	650 712 687 619 675 790 759 702 667 638 530 501 563 567 689 739 873 961 1220 1260 1240 1230 1160 1170	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501 541 567 689 713 873 961 1180 1180 1120 1150 1160 1170 880 574 634	525 685 630 611 650 724 736 684 656 467 433 465 532 552 651 723 771 910 1080 1240 1230 1160 1160 1160 1180 1080 669	1200 1410 1400 436 483 495 496 495 513 526 539 547 546 546 549 549 541 538 530 542 545 666 542 522 456 470 849 975	1140 1090 395 395 436 480 489 487 488 513 536 543 538 540 534 521 516 511 534 433 455 405	1160 1220 1140 414 464 489 492 492 504 520 531 541 544 542 545 544 529 523 529 538 6450 444 463 667 908	547 580 621 623 603 805 640 618 604 531 536 682 897 1010 1060 1060 869 499 514 668 789 1190 1210 732 746	\$\text{SEPTEMBE}\$ \text{524} \\ 546 \\ 580 \\ 596 \\ 597 \\ 595 \\ 506 \\ 459 \\ 531 \\ 510 \\ 496 \\ 536 \\ 682 \\ 897 \\ 1010 \\ 869 \\ 424 \\ 400 \\ 406 \\ 514 \\ 668 \\ 733 \\ 721 \\ 726 \\ 746 \\ 777 \\ 808 \\ 841	537 558 600 614 600 674 542 528 562 518 509 595 793 944 1040 1020 523 434 450 590 750 998 960 727 733 761 793 824 858
1 2 3 4 4 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740 768 652 693 750 768 728 363 392 413 439 787 802 806 1140 497	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555 570 549 554 651 677 574 253 287 328 363 392 413 439 771 768 461 390	572 409 445 307 460 356 499 660 654 733 945 800 677 626 623 612 671 729 339 371 341 374 402 424 620 793 782 801 433	650 712 687 619 675 790 759 702 667 638 530 501 563 567 689 739 873 961 1220 1260 1240 1230 1160 1170	JULY 427 650 556 604 619 675 702 667 636 387 381 426 501 541 567 689 713 873 961 1180 1180 1180 1150 1160 1170 880 574 661	525 685 630 611 650 724 736 684 656 467 433 465 532 552 651 723 771 910 1080 1240 1230 1190 1160 1160 1180 696 669 672	1200 1410 1410 436 483 495 496 495 513 526 539 547 546 546 549 549 541 538 530 542 545 666 542 542 542 542 542 542 542 542 542 542	1140 1090 395 395 436 480 489 487 488 513 523 536 543 534 529 515 511 521 516 511 534 435 405 435 405	1160 1220 1140 414 464 489 492 492 504 520 531 541 542 545 544 537 529 523 529 538 530 486 450 444 463 667 908 958	547 580 621 623 603 805 640 618 604 531 536 682 897 1010 1060 1060 869 499 514 668 789 1190 1210 732 746	\$24	537 558 600 614 600 674 542 528 562 518 509 595 793 944 1040 1020 523 434 450 590 750 998 960 727 733 761 793 824 858 876
1 2 3 4 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	690 472 508 441 548 548 618 742 696 762 1120 1090 882 740 768 652 693 758 363 392 413 439 787 806 1140 497 	JUNE 99 341 348 193 369 264 424 608 614 696 762 676 555 570 549 554 651 677 574 253 287 328 363 392 413 439 771 768 461 390	572 409 445 307 460 356 499 660 654 733 945 800 677 626 623 612 671 724 709 339 371 341 374 402 424 620 793 782 801 433 782	650 712 687 619 675 790 759 702 667 638 530 501 563 567 689 739 873 961 1220 1260 1240 1240 1230 1160 1170	JULY 427 650 556 604 619 675 702 636 387 381 426 501 541 567 689 713 873 961 1180 1180 1150 1150 1160 1170 880 574 634 661 735	525 685 630 611 650 724 736 684 656 467 433 465 532 552 651 723 771 910 1080 1240 1230 1190 1160 1160 1180 1080 669 672 917	1200 1410 1400 436 483 495 496 495 513 526 539 547 546 549 549 549 549 541 538 530 542 545 666 542 522 456 470 849 975 686 526	1140 1090 395 395 436 480 489 487 488 513 536 543 538 540 534 529 521 516 511 534 433 455 405	1160 1220 1140 414 464 489 492 492 504 520 531 541 544 542 545 544 537 529 523 529 538 546 450 463 667 908 558 473	547 580 621 623 603 805 640 618 604 531 536 682 897 1010 1060 1060 1060 869 499 514 668 789 1190 732 746 777 824 888 880 885 	\$\text{SEPTEMBE}\$ \text{524} & 546 & 580 & 596 & 597 \\ \text{595} & 506 & 459 & 531 & 510 & 496 & 536 & 682 & 897 & 1010 & 869 & 424 & 400 & 406 & 514 & 668 & 733 & 721 & 726 & 746 & 777 & 808 & 841 & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & & 845 & -	537 558 600 614 600 674 542 528 562 518 509 595 793 944 1040 1020 523 434 450 590 750 998 960 727 733 761 793 824 858 876

> 06892440 CEDAR CREEK AT HIGHWAY 56 AT OLATHE, KS--Continued PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX		MEDIAN	MAX		MEDIAN	MAX		MEDIAN	MAX		MEDIAN
DAI	I'IAX	OCTOBER			NOVEMBER			DECEMBER		PIAX	JANUAR	
1	7.0							DECEMBER			JANUAR	
1 2	7.9 7.8	7.8 7.6	7.9	7.5 7.8	7.4	7.4 7.5						
3 4	7.7 7.6	7.6 7.5	7.6 7.6	7.7 7.6	7.5 7.5	7.6 7.5						
5	8.0	7.5	7.7	7.8	7.6	7.6						
6	7.9	7.6	7.8	8.0	7.7	7.8						
7 8	8.0 8.1	7.8 7.9	7.9 8.0	8.0 8.0	7.7 7.9	7.8 7.9						
9 10	8.1 8.0	7.9 7.9	8.0 8.0	8.1 8.0	7.8 7.8	8.0 7.9						
11	8.0	7.8	7.9	8.0	7.8	7.9						
12 13	7.8 7.6	7.5 7.5	7.6 7.5	7.9 8.0	7.7 7.7	7.8 7.9						
14	7.5	7.4	7.4	7.9	7.7	7.9						
15	7.7	7.5	7.6	8.0	7.7	7.9						
16 17	7.7 7.6	7.5 7.5	7.6 7.6	8.0 8.0	7.7 8.0	7.9 8.0						
18 19	7.6	7.5	7.6	8.0	7.9	8.0						
20	7.6 7.6	7.5 7.5	7.6 7.6	7.9 7.9	7.9 7.9	7.9 7.9						
21	7.6	7.5	7.6	7.9	7.9	7.9						
22 23	7.5 7.9	7.4 7.4	7.5 7.8	7.9 7.9	7.9 7.8	7.9 7.8						
24	7.8	7.6	7.6	7.8	7.8	7.8						
25	7.9	7.5	7.6	7.8	7.8	7.8						
26 27	7.6 7.5	7.5 7.4	7.5 7.4	7.8 7.8	7.8 7.7	7.8 7.8						
28	7.5	7.3	7.4	7.7	7.7	7.7						
29 30	7.5 7.4	7.4 7.3	$7.4 \\ 7.4$	7.7	7.7	7.7						
31	7.6	7.3	7.4									
MAX	8.1 7.4	7.9 7.3	8.0 7.4	8.1 7.5	8.0 7.4	8.0 7.4						
MIN												
				MAX	MTN	MEDIAN	MAX	MTN	MEDTAN	MAX	MTN	MEDTAN
DAY	MAX	MIN I	MEDIAN	MAX		MEDIAN	MAX	MIN	MEDIAN	MAX		MEDIAN
DAY	MAX 1	MIN 1	MEDIAN		MARCH			APRIL			MAY	
DAY 1 2	MAX 	MIN N FEBRUARY	MEDIAN	8.0 8.0	MARCH 7.9 7.9	7.9 8.0	8.5 8.3	APRIL 7.8 7.8	7.9 8.1	8.0 7.8	MAY 7.3 7.2	7.6 7.5
DAY 1 2 3	MAX 	MIN N FEBRUARY	MEDIAN	8.0 8.0 7.9	MARCH 7.9 7.9 7.9	7.9 8.0 7.9	8.5 8.3 8.0	7.8 7.8 7.9	7.9 8.1 7.9	8.0 7.8 8.1	MAY 7.3 7.2 7.3	7.6 7.5 7.5
DAY 1 2	MAX	MIN N FEBRUARY 	MEDIAN	8.0 8.0	MARCH 7.9 7.9	7.9 8.0	8.5 8.3	APRIL 7.8 7.8	7.9 8.1	8.0 7.8	MAY 7.3 7.2	7.6 7.5
DAY 1 2 3 4 5	MAX	MIN N	MEDIAN	8.0 8.0 7.9 8.0 8.0	7.9 7.9 7.9 7.9 7.9 7.9	7.9 8.0 7.9 7.9 8.0	8.5 8.3 8.0 7.9 7.9	7.8 7.8 7.9 7.8 7.5	7.9 8.1 7.9 7.8 7.6	8.0 7.8 8.1 7.8 7.5	MAY 7.3 7.2 7.3 7.4 7.3	7.6 7.5 7.5 7.5 7.4
DAY 1 2 3 4 5	MAX	MIN N	MEDIAN	8.0 8.0 7.9 8.0 8.0	7.9 7.9 7.9 7.9 7.9	7.9 8.0 7.9 7.9 8.0	8.5 8.3 8.0 7.9 7.9	7.8 7.8 7.9 7.8 7.5	7.9 8.1 7.9 7.8 7.6	8.0 7.8 8.1 7.8 7.5	MAY 7.3 7.2 7.3 7.4 7.3	7.6 7.5 7.5 7.4 7.4 7.5
DAY 1 2 3 4 5 6 7 8 9	MAX	MIN N	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.0 8.1 8.1	7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0	7.9 8.0 7.9 7.9 8.0 8.0 8.0	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1	7.8 7.8 7.9 7.8 7.5 7.4 7.7 7.7	7.9 8.1 7.9 7.8 7.6 7.6 7.9 8.0 7.9	8.0 7.8 8.1 7.8 7.5 7.5 7.5 7.4	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.3	7.6 7.5 7.5 7.5 7.4 7.4 7.5 7.4 7.3
DAY 1 2 3 4 5 6 7 8 9 10	MAX 1	MIN P	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.0 8.1 8.1	MARCH 7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0	7.9 8.0 7.9 8.0 8.0 8.0 8.0 8.0	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1	7.8 7.8 7.9 7.8 7.5 7.4 7.7 7.7 7.6 7.6	7.9 8.1 7.9 7.8 7.6 7.6 7.9 8.0 7.9	8.0 7.8 8.1 7.5 7.5 7.4 7.3 8.0	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.3	7.6 7.5 7.5 7.5 7.4 7.4 7.5 7.4 7.3
DAY 1 2 3 4 5 6 7 8 9 10 11 12	MAX	MIN N	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.1 8.1 8.1 8.1	7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0	7.9 8.0 7.9 7.9 8.0 8.0 8.0 8.1	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1 8.3	APRIL 7.8 7.9 7.8 7.5 7.4 7.7 7.6 7.6 7.6 7.9 7.8	7.9 8.1 7.9 7.8 7.6 7.6 7.9 8.0 7.9 7.8	8.0 7.8 8.1 7.5 7.5 7.5 7.4 7.3 8.0	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.6 7.6	7.6 7.5 7.5 7.4 7.4 7.5 7.4 7.3 7.4
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13	MAX 1	MIN N	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.1 8.1 8.1 8.1	MARCH 7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0 8.0 8.0	7.9 8.0 7.9 7.9 8.0 8.0 8.0 8.0 8.1 8.1	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1 8.3	7.8 7.8 7.9 7.5 7.4 7.7 7.7 7.6 7.6 7.9 7.8	7.9 8.1 7.9 7.8 7.6 7.9 8.0 7.9 7.8	8.0 7.8 8.1 7.5 7.5 7.5 7.4 7.3 8.0	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.6 7.6 7.6 7.4	7.6 7.5 7.5 7.5 7.4 7.4 7.5 7.4 7.3 7.4 7.7
DAY 1 2 3 4 5 6 7 8 9 10 11 12	MAX 1	MIN PEBRUARY	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.1 8.1 8.1 8.1	7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0	7.9 8.0 7.9 7.9 8.0 8.0 8.0 8.1	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1 8.3	APRIL 7.8 7.9 7.8 7.5 7.4 7.7 7.6 7.6 7.6 7.9 7.8	7.9 8.1 7.9 7.8 7.6 7.6 7.9 8.0 7.9 7.8	8.0 7.8 8.1 7.5 7.5 7.5 7.4 7.3 8.0	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.6 7.6	7.6 7.5 7.5 7.4 7.4 7.5 7.4 7.3 7.4
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	MAX 1	MIN N	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.1 8.1 8.1 8.1 8.2 8.3 8.1	MARCH 7.9 7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0 7.9 7.9 7.9	7.9 8.0 7.9 7.9 8.0 8.0 8.0 8.1 8.0 8.1 7.9 8.0	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1 8.3 8.1 8.3	APRIL 7.8 7.8 7.9 7.8 7.5 7.4 7.7 7.6 7.6 7.6 7.9 7.8 8.0 7.7	7.9 8.1 7.9 7.8 7.6 7.9 8.0 7.9 7.8 8.1 7.9 8.0 8.1	8.0 7.8 8.1 7.8 7.5 7.5 7.5 7.4 7.3 8.0 7.7 7.6 8.0 7.6	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.6 7.6 7.6 7.7 7.3 7.3 7.3 7.3	7.6 7.5 7.5 7.5 7.4 7.4 7.5 7.4 7.3 7.7 7.6 7.5 7.4 7.7
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	MAX 1	MIN P	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.1 8.1 8.1 8.1 8.1 8.1	MARCH 7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0 7.9 7.9 7.9 7.9	7.9 8.0 7.9 7.9 8.0 8.0 8.0 8.0 8.1 8.1 7.9 8.0	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1 8.3 8.3 8.3	7.8 7.8 7.9 7.5 7.4 7.7 7.6 7.6 7.8 7.7 7.8	7.9 8.1 7.9 7.8 7.6 7.6 7.9 8.0 7.8 8.1 7.9 7.8 8.1 7.9	8.0 7.8 8.1 7.5 7.5 7.4 7.3 8.0 8.0 7.6 8.0	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.4 7.3 7.3 7.6 7.6 7.6 7.3 7.3	7.6 7.5 7.5 7.5 7.4 7.4 7.5 7.4 7.6 7.6 7.5 7.4 7.6 7.5
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	MAX 1	MIN N	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.0 8.1 8.1 8.1 8.1 8.2 8.3 8.1 8.1 8.0 7.9 8.0	MARCH 7.9 7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0 7.9 7.9 7.9 7.9 7.9 7.9	7.9 8.0 7.9 7.9 8.0 8.0 8.0 8.1 8.0 8.1 7.9 8.0	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1 8.3 8.1 8.3 8.4 8.3	APRIL 7.8 7.8 7.9 7.8 7.5 7.4 7.7 7.6 7.6 7.6 7.8 8.0 7.7 7.8 8.0 7.7 7.8 7.9 7.9	7.9 8.1 7.9 7.8 7.6 7.9 8.0 7.9 7.8 8.1 7.9 8.0 8.1	8.0 7.8 8.1 7.8 7.5 7.5 7.5 7.4 7.3 8.0 7.7 8.0 7.6 7.6	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.6 7.6 7.6 7.6 7.3 7.3 7.3 7.4 7.3 7.3 7.4 7.4 7.3 7.3	7.6 7.5 7.5 7.5 7.4 7.4 7.5 7.4 7.7 7.6 7.5 7.4 7.7 7.4 7.4 7.4 7.3 7.6 7.5
DAY 1 2 3 4 5 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20	MAX	MIN PEBRUARY	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.1 8.1 8.1 8.1 8.2 8.3 8.1 8.0 7.9 8.0 8.0	MARCH 7.9 7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0 7.9 7.9 7.9 7.9 7.9 7.9 7.9	7.9 8.0 7.9 7.9 8.0 8.0 8.0 8.1 8.1 7.9 8.0	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1 8.3 8.1 8.2 8.4 8.3 8.3	7.8 7.8 7.9 7.8 7.5 7.4 7.7 7.6 7.6 7.8 8.0 7.7 7.8 8.0	7.9 8.1 7.9 7.8 7.6 7.6 7.9 8.0 7.9 7.8 8.1 7.9 7.8 8.0 8.1	8.0 7.8 8.1 7.5 7.5 7.5 7.4 7.3 8.0 8.0 7.7 7.6 8.0 7.7 7.6	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.6 7.6 7.4 7.3 7.3 7.6 7.4 7.3 7.3	7.6 7.5 7.5 7.4 7.4 7.5 7.4 7.7 7.6 7.5 7.4 7.7 7.6 7.5 7.4 7.5
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	MAX 1	MIN N	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.1 8.1 8.1 8.1 8.2 8.3 8.1 8.1 8.0 7.9 8.0 8.0	MARCH 7.9 7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0 7.9 7.9 7.9 7.9 7.9 7.8 7.8 7.8 7.8 7.8 7.8	7.9 8.0 7.9 7.9 8.0 8.0 8.0 8.1 8.1 7.9 8.0 7.9 7.9 7.9 8.0	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1 8.3 8.1 8.2 8.3 8.1 8.4 8.3	APRIL 7.8 7.8 7.8 7.9 7.6 7.6 7.6 7.6 7.7 7.7 7.8 8.0 7.7 8 8.0 7.7 8 7.9 7.9 8.0 7.8 7.9	7.9 8.1 7.9 7.8 7.6 7.6 7.9 8.0 7.9 7.8 8.1 7.9 8.0 8.1 8.2 8.1	8.0 7.8 8.1 7.5 7.5 7.5 7.4 7.3 8.0 7.7 8.0 7.6 8.0 7.6 7.6 7.5 7.5	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.6 7.6 7.6 7.7 7.3 7.3 7.3 7.5 7.5	7.6 7.5 7.5 7.5 7.4 7.4 7.5 7.4 7.6 7.5 7.4 7.6 7.5 7.4 7.6 7.5 7.4 7.6 7.5
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	MAX 1	MIN N	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.0 8.1 8.1 8.1 8.1 8.2 8.3 8.1 8.1 8.1	MARCH 7.9 7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0 7.9 7.9 7.9 7.9 7.8 7.8 7.8 7.8 7.8 7.8 7.8	7.9 8.0 7.9 7.9 8.0 8.0 8.0 8.1 8.1 8.1 7.9 8.0 7.9 7.9 7.9 7.9 7.9 8.0	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1 8.2 8.4 8.3 8.3 8.3 8.3 8.4	APRIL 7.8 7.8 7.9 7.8 7.5 7.4 7.7 7.6 7.6 7.8 8.0 7.7 7.8 8.0 7.7 7.8 8.0 7.9 8.0	7.9 8.1 7.9 7.8 7.6 7.6 7.9 8.0 7.8 8.1 7.9 8.0 8.1 8.2 8.1	8.0 7.8 8.1 7.5 7.5 7.5 7.4 7.3 8.0 7.6 8.0 7.6 7.7 7.6 7.7 7.6	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.6 7.4 7.3 7.6 7.4 7.3 7.5 7.5	7.6 7.5 7.5 7.5 7.4 7.4 7.5 7.4 7.6 7.5 7.4 7.5 7.4 7.5 7.4 7.5 7.4 7.5 7.6 7.5 7.6 7.5
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	MAX	MIN P	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.1 8.1 8.1 8.1 8.1 8.2 8.3 8.1 8.0 7.9 8.0 8.0	MARCH 7.9 7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0 7.9 7.9 7.9 7.9 7.9 7.8 7.8 7.8 7.8 7.8 7.8	7.9 8.0 7.9 7.9 8.0 8.0 8.0 8.1 8.1 7.9 8.0 7.9 7.9 7.9 8.0	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1 8.3 8.1 8.2 8.3 8.1 8.4 8.3	APRIL 7.8 7.8 7.8 7.9 7.6 7.6 7.6 7.6 7.7 7.7 7.8 8.0 7.7 8 8.0 7.7 8 7.9 7.9 8.0 7.8 7.9	7.9 8.1 7.9 7.8 7.6 7.6 7.9 8.0 7.9 7.8 8.1 7.9 8.0 8.1 8.2 8.1	8.0 7.8 8.1 7.5 7.5 7.5 7.4 7.3 8.0 7.7 8.0 7.6 8.0 7.6 7.6 7.5 7.5	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.6 7.6 7.6 7.7 7.3 7.3 7.3 7.5 7.5	7.6 7.5 7.5 7.5 7.4 7.4 7.5 7.4 7.6 7.5 7.4 7.6 7.5 7.4 7.6 7.5 7.4 7.6 7.5
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	MAX 1	MIN N	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.1 8.1 8.1 8.1 8.2 8.3 8.1 8.1 8.2 8.2 8.2 8.2	MARCH 7.9 7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0 7.9 7.9 7.9 7.9 7.9 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8	7.9 8.0 7.9 7.9 8.0 8.0 8.0 8.1 8.1 7.9 8.0 7.9 7.9 7.9 8.0 8.1 8.1 8.1	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1 8.3 8.1 8.3 8.4 8.3 8.4 8.3 8.4 8.5 8.6 8.6 8.6 8.4 8.1 8.1 8.1	APRIL 7.8 7.8 7.9 7.8 7.5 7.4 7.7 7.6 7.6 7.6 7.9 7.8 8.0 7.7 7.8 8.0 7.7 7.8 8.0 7.7 7.8 7.9 8.0 7.7 7.8 7.9 7.9 8.0 7.6 7.6 7.6 7.6 7.7 7.8 7.7 7.8 7.7 7.8 7.9 7.9 8.0 7.6 7.6 7.6 7.6 7.7 7.8 7.9 7.9 8.0	7.9 8.1 7.9 7.8 7.6 7.9 7.8 8.0 7.9 7.8 8.0 8.1 7.9 8.0 8.1 7.9 8.0 8.1 7.9	8.0 7.8 8.1 7.8 7.5 7.5 7.5 7.4 7.3 8.0 7.7 7.6 8.0 7.6 7.6 7.7 7.7 7.6 7.5 7.5	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.6 7.6 7.6 7.6 7.7 7.3 7.3 7.3 7.5 7.5 7.5 7.5 7.5 7.5	7.6 7.5 7.5 7.5 7.4 7.4 7.3 7.4 7.7 7.6 7.5 7.4 7.4 7.3 7.6 7.5 7.4 7.5 7.4 7.5 7.6 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5
DAY 1 2 3 4 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	MAX	MIN P	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.1 8.1 8.1 8.1 8.1 8.2 8.3 8.1 8.0 7.9 8.0 8.0 8.1 8.2 8.3 8.1 8.1	MARCH 7.9 7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0 7.9 7.9 7.9 7.9 7.8 7.8 7.8 7.8 7.8 8.0 8.0 8.0 8.0 7.9 7.9 7.9	7.9 8.0 7.9 7.9 8.0 8.0 8.0 8.1 8.1 7.9 8.0 7.9 7.9 7.9 8.0 8.1 8.1 8.1 8.1	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1 8.2 8.4 8.3 8.4 8.5 8.6 8.6 8.6 8.6 8.1 8.1 8.1 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	7.8 7.8 7.9 7.8 7.5 7.4 7.7 7.6 7.6 7.8 7.7 7.8 8.0 7.7 7.8 8.0 7.9 8.0 7.9 8.0 7.9	7.9 8.1 7.8 7.6 7.6 7.9 8.0 7.8 8.1 7.9 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 7.9	8.0 7.8 8.1 7.5 7.5 7.5 7.4 7.3 8.0 7.7 7.6 8.0 7.7 7.6 7.6 7.7 7.6 7.6 7.7 7.6 7.6	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.6 7.4 7.3 7.3 7.6 7.4 7.3 7.5 7.5 7.5 7.5 7.4 7.5 7.4 7.5	7.6 7.5 7.5 7.4 7.4 7.5 7.4 7.6 7.5 7.4 7.6 7.5 7.4 7.6 7.5 7.4 7.6 7.5 7.6 7.5 7.6 7.5 7.5 7.5
DAY 1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	MAX 1	MIN P	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.1 8.1 8.1 8.1 8.1 8.2 8.3 8.1 8.0 7.9 8.0 8.0 8.1 8.1 8.2 8.3 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	MARCH 7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0 7.9 7.9 7.9 7.9 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8	7.9 8.0 7.9 7.9 8.0 8.0 8.0 8.1 8.1 8.1 8.0 8.1 8.1 8.0 8.1 8.1 8.0 8.1 8.0 8.1 8.0 8.1 8.0 8.1 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1 8.3 8.1 8.3 8.4 8.3 8.4 8.5 8.6 8.6 8.6 8.6 8.1 8.1 8.1 8.1 8.5	APRIL 7.8 7.8 7.9 7.8 7.5 7.4 7.7 7.6 7.6 7.6 7.9 7.8 8.0 7.7 7.8 8.0 7.7 7.8 8.0 7.7 7.8 7.9 8.0 7.7 7.8 7.9 8.0 7.7 7.8 7.9 8.0 7.7 7.8 7.9 8.0 7.7 7.8 7.9 8.0 7.7 7.8 7.9 8.0 7.7 7.8 7.9 8.0 7.7 7.8 7.9 8.0 7.7 7.8 7.9 8.0 7.7 7.8 7.9 8.0 7.7 7.8 7.9 8.0	7.9 8.1 7.9 7.8 7.6 7.9 7.8 8.0 7.9 7.8 8.0 8.1 7.9 8.0 8.1 7.9 8.0 8.1 7.9 7.8 8.0 7.9 7.8 8.0 7.9 7.8 8.0 7.9 7.8 8.0 7.9 7.8 8.0 7.9 7.8 8.0 7.9 7.8 8.0 7.9 7.8 8.0 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	8.0 7.8 8.1 7.8 7.5 7.5 7.5 7.4 7.3 8.0 7.7 7.6 8.0 7.6 7.6 7.7 7.6 7.6 7.6 7.6 7.6 7.7	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.6 7.6 7.6 7.6 7.7 7.3 7.3 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5	7.6 7.5 7.5 7.5 7.4 7.4 7.3 7.4 7.7 7.6 7.5 7.4 7.4 7.3 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6
DAY 1 2 3 4 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	MAX 1	MIN N FEBRUARY	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.1 8.1 8.1 8.1 8.1 8.2 8.3 8.1 8.0 7.9 8.0 8.0 8.1 8.2 8.3 8.1 8.1	MARCH 7.9 7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0 7.9 7.9 7.9 7.9 7.8 7.8 7.8 7.8 7.8 8.0 8.0 8.0 8.0 7.9 7.9 7.9	7.9 8.0 7.9 7.9 8.0 8.0 8.0 8.1 8.1 7.9 8.0 7.9 7.9 7.9 8.0 8.1 8.1 8.1 8.1	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1 8.2 8.4 8.3 8.4 8.5 8.6 8.6 8.6 8.6 8.1 8.1 8.1 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	7.8 7.8 7.9 7.8 7.5 7.4 7.7 7.6 7.6 7.8 7.7 7.8 8.0 7.7 7.8 8.0 7.9 8.0 7.9 8.0 7.9	7.9 8.1 7.8 7.6 7.6 7.9 8.0 7.8 8.1 7.9 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 7.9	8.0 7.8 8.1 7.5 7.5 7.5 7.4 7.3 8.0 7.7 7.6 8.0 7.7 7.6 7.6 7.7 7.6 7.6 7.7 7.6 7.6	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.6 7.4 7.3 7.3 7.6 7.4 7.3 7.5 7.5 7.5 7.5 7.4 7.5 7.4 7.5	7.6 7.5 7.5 7.4 7.4 7.5 7.4 7.6 7.5 7.4 7.6 7.5 7.4 7.6 7.5 7.4 7.6 7.5 7.6 7.5 7.6 7.5 7.5 7.5
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	MAX 1	MIN PEBRUARY	MEDIAN	8.0 8.0 7.9 8.0 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.2 8.3 8.0 7.9 8.0 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	7.9 7.9 7.9 7.9 7.9 7.9 8.0 8.0 8.0 8.0 8.0 7.9 7.9 7.9 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.7 8.0 8.0 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	7.9 8.0 7.9 7.9 8.0 8.0 8.0 8.1 8.1 8.1 8.1 8.0 8.1 8.1 8.0 8.1 8.0 8.1 8.0 8.1 8.0 8.1 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	8.5 8.3 8.0 7.9 7.9 8.0 8.4 8.3 8.1 8.2 8.3 8.1 8.3 8.3 8.1 8.4 8.3 8.3 8.1 8.4 8.3 8.1 8.3 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	7.8 7.8 7.8 7.9 7.6 7.6 7.6 7.6 7.7 7.7 7.8 8.0 7.7 8.0 7.8 7.9 7.9 8.0 7.8 7.9 7.9 8.0 7.8 7.9 7.9 8.0 7.8 7.9 7.9 8.0 7.8 7.9 7.9 8.0 7.8 7.3 7.3	7.9 8.1 7.9 7.8 7.6 7.9 7.8 8.1 7.9 8.0 8.1 7.9 8.0 8.1 8.1 8.1 8.1 8.1 8.1 7.9	8.0 7.8 8.1 7.5 7.5 7.5 7.5 7.6 8.0 7.6 7.6 7.6 7.7 7.6 7.6 7.7 7.6 7.6 7.6	MAY 7.3 7.2 7.3 7.4 7.3 7.4 7.3 7.6 7.6 7.7 7.3 7.3 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5	7.6 7.5 7.5 7.5 7.4 7.4 7.5 7.4 7.6 7.5 7.4 7.4 7.6 7.5 7.4 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6

06892440 CEDAR CREEK AT HIGHWAY 56 AT OLATHE, KS--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

	PH,	WATER,	WHOLE,	FIELD, STAI	NDARD UN	IIS, WAIE	R YEAR OCT	OBER 20	UU TO SEE	TEMBER 20	OI	
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			JULY		i	AUGUST			SEPTEMBE	lR.
1	8.1	7.6	7.7	7.8	7.4	7.5	8.5	7.8	7.9	7.9	7.7	7.7
2	7.8 7.7	7.7 7.5	7.7 7.6	7.7 7.7	$7.4 \\ 7.4$	7.5 7.5	8.4 8.7	8.0 7.9	8.1 8.0	8.1 8.1	7.6 7.7	7.7 7.8
4 5	7.9 7.6	7.5 7.5	7.6 7.6	7.7 7.6	7.5 7.5	7.6 7.5	8.4 8.2	8.1	8.2 8.1	7.8 8.0	7.6 7.7	7.8 7.8
6 7	7.9 7.6	7.6 7.6	7.7 7.6	7.6 7.8	7.4 7.5	7.5 7.6	8.2 8.2	8.0	8.1 8.1	7.9 8.2	7.7 7.7	7.8 7.9
8 9	7.7 7.8	7.6	7.6 7.7	7.9 8.1	7.5	7.7 7.7	8.2	8.1	8.1 8.1	7.9 7.9	7.8 7.8	7.9
10	7.8	7.7 7.8	7.7	8.0	7.6 7.8	7.7	8.3 8.1	8.1 7.7	7.8	7.9	7.8	7.9 7.9
11	7.8	7.7	7.8	8.0	7.7	7.9	8.1	7.6	7.7	8.0	7.9	7.9
12 13	7.8 7.9	7.7 7.7	7.8 7.8	8.0 8.1	7.8 7.7	7.9 7.8	8.0 8.2	7.5 7.5	7.7 7.6	7.9 7.7	7.7 7.6	7.7 7.7
14	7.9	7.7	7.8	8.1	7.6	7.7	8.3	7.5	7.8	7.7	7.6	7.7
15	7.8	7.8	7.8	7.9	7.5	7.7	8.0	7.6	7.7	7.7	7.6	7.6
16 17	7.8 7.8	7.7 7.7	7.8 7.7	8.0 8.2	7.6 7.6	7.7 7.7	8.0 7.8	7.5 7.5	7.6 7.6	7.6 7.9	7.6 7.6	7.6 7.8
18	7.8	7.7	7.8	8.0	7.6	7.7	8.6	7.6	7.9	7.9	7.7	7.8
19 20	7.8 7.8	7.6 7.6	7.7 7.7	7.8 7.9	7.5 7.6	7.6 7.7	8.3 8.7	7.7 7.7	7.9 8.1	7.7 7.7	7.6 7.6	7.7 7.7
21	7.6	7.5	7.5	7.9	7.6	7.8	8.2	7.7	8.1	7.7	7.7	7.7
22	7.5	7.4	7.5	8.1	7.6	7.7	8.2	7.8	8.0	7.7	7.6	7.6
23 24	$7.4 \\ 7.4$	7.4 7.3	7.4 7.3	8.2 8.2	7.7 7.6	7.9 7.8	8.2 8.4	7.7 7.8	7.9 8.0	7.8 7.7	7.6 7.7	7.7 7.7
25	7.3	7.3	7.3	8.0	7.7	7.8	8.1	7.8	8.0	7.7	7.6	7.7
26	7.6	7.3	7.4	7.9	7.6	7.8	7.9	7.7	7.8	7.6	7.6	7.6
27 28	7.5 7.5	$7.4 \\ 7.4$	7.5 7.5	7.9 8.1	7.7 7.7	7.8 8.1	8.1 8.0	7.7 7.7	7.7 7.8	7.6 7.6	7.4 7.5	7.5 7.5
29	7.7	7.4	7.5	8.3	7.8	8.0	8.3	7.5	7.7	7.6	7.5	7.6
30 31	7.7 	7.4	7.6	8.3 8.3	7.9 7.9	8.0 8.0	8.3 7.9	7.8 7.8	7.9 7.8	7.6 	7.6	7.6
MAX	8.1	7.8	7.8	8.3	7.9	8.1	8.7	8.1	8.2	8.2	7.9	7.9
MIN	7.3	7.3	7.3	7.6	7.4	7.5	7.8	7.5	7.6	7.6	7.4	7.5
		MEMP		MARIED (DE	a a) r	AMED VEAD	OGHODED O	000 50	CEDMENDER	2001		
				WATER (DEC								
DAY	MAX	TEMP MIN	ERATURE ,	WATER (DEC	G. C), W	ATER YEAR	OCTOBER 2	000 TO MIN	SEPTEMBEF MEAN	R 2001 MAX	MIN	MEAN
DAY	MAX		MEAN	MAX		MEAN	MAX		MEAN		MIN JANUARY	
1	19.9	MIN OCTOBE	MEAN	MAX 1	MIN NOVEMBER 17.7	MEAN	MAX Di	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3	19.9 20.3 21.3	MIN OCTOBE 16.1 17.3 17.8	MEAN R 18.1 18.8 19.6	MAX 18.9 17.7 14.5	MIN NOVEMBER 17.7 14.5 13.0	MEAN 18.3 16.0 13.7	MAX DI	MIN ECEMBER 	MEAN	MAX	JANUARY	
1 2 3 4	19.9 20.3 21.3 21.2	MIN OCTOBE 16.1 17.3 17.8 16.6	MEAN R 18.1 18.8 19.6 18.1	MAX 18.9 17.7 14.5 13.1	MIN NOVEMBER 17.7 14.5 13.0 10.9	MEAN 18.3 16.0 13.7 12.2	MAX DI	MIN ECEMBER 	MEAN	MAX	JANUARY	
1 2 3 4 5	19.9 20.3 21.3 21.2 16.6	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8	MEAN R 18.1 18.8 19.6 18.1 15.8	MAX 18.9 17.7 14.5 13.1 13.3	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4	18.3 16.0 13.7 12.2 12.1	MAX DI	MIN ECEMBER 	MEAN	MAX	JANUARY	
1 2 3 4 5	19.9 20.3 21.3 21.2 16.6	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0	MAX DI	MIN ECEMBER 	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 11.8 9.4 7.0	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 8.5	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.7	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5	19.9 20.3 21.3 21.2 16.6	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9 9.2 9.4	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 11.8 9.4 7.0 5.7 5.8 7.3	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 8.5 7.6 7.8	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7 7.5 6.3	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.7 6.3 4.9 4.9	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9 9.2 9.4	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 11.8 9.4 7.0 5.7 5.8 7.3	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 8.5 7.6 6 7.8	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7 7.5 6.3 5.3 6.7	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.7 6.3 4.9 5.3	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5 5.1 5.9	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9 9.2 9.4	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 11.8 9.4 7.0 5.7 5.8 7.3 10.6 13.4 14.9	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 7.6 7.8 9.0 12.2 14.4 15.3	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7 7.5 6.3 5.3 6.7 5.8 5.3	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.7 6.3 4.9 4.9 5.3 4.3 3.8	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5 5.1 5.9 5.1 4.6	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9 9.2 9.4	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 11.8 9.4 7.0 5.7 5.8 7.3 10.6 13.4	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 8.5 7.6 7.8 9.0 12.2 14.4	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7 7.5 6.3 5.3 6.7 5.8	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.7 6.3 4.9 5.3 4.3	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5 5.1 5.9 5.1	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9 9.2 9.4 10.8 13.9 15.3 15.8 16.1	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 9.4 7.0 5.7 5.8 7.3 10.6 13.4 14.9 15.5	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 8.5 7.6 7.8 9.0 12.2 14.4 15.3 15.7	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7 7.5 6.3 5.3 6.7 5.8 5.3 5.3	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.7 6.3 4.9 4.9 5.3 4.3 3.8 3.5 2.9	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5 5.1 5.9 5.1 4.6 4.3 3.8	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9 9.2 9.4 10.8 13.9 15.3 15.8 16.1	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 11.8 9.4 7.0 5.7 5.8 7.3 10.6 13.4 14.9 15.5 14.5 12.6	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 7.6 7.8 9.0 12.2 14.4 15.3 15.7 15.3 13.8 13.8	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7 7.5 6.3 5.3 6.7 5.8 5.3 5.3 4.4 4.4 4.5	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.7 6.3 4.9 5.3 3.8 3.5 2.9 2.2 3.0	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5 5.1 4.6 4.3 3.8 3.4 3.8	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9 9.2 9.4 10.8 13.9 15.3 16.1	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 11.8 9.4 7.0 5.7 5.8 7.3 10.6 13.4 14.9 15.5 14.5 12.6	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 8.5 7.6 67.8 9.0 12.2 14.4 15.3 15.7	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7 7.5 6.3 5.3 6.7 5.8 5.3 4.4 4.4	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.3 4.9 5.3 4.3 3.8 3.5 2.9 2.2	18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5 5.1 5.9 5.1 4.3 3.8 3.4	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9 9.2 9.4 10.8 13.9 15.3 15.8 16.1 15.8 14.9 15.1 15.8 16.0	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 11.8 9.4 7.0 5.7 5.8 7.3 10.6 13.4 14.9 15.5 14.5 12.6 12.4 13.9	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 8.5 7.6 7.8 9.0 12.2 14.4 15.3 15.7 15.3 13.8 14.7 15.1	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7 7.5 6.3 5.3 6.7 5.8 5.3 5.3 4.4 4.5 4.4 3.6	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.7 6.3 4.9 5.3 3.8 3.5 5 2.9 2.2 2.3 0.0 3.1 2.0	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5 5.1 5.9 5.1 4.6 4.3 3.8 3.8 3.8 3.8	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9 9.2 9.4 10.8 13.9 15.8 16.1 15.8 14.9 15.1 16.0	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 11.8 9.4 7.0 5.7 5.8 7.3 10.6 13.4 14.9 15.5 14.5 12.6 12.4 13.4 13.9 14.6 15.9	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 8.5 7.6 6 7.8 9.0 12.2 14.4 15.3 15.7 15.3 13.8 14.7 15.1	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7 7.5 6.3 5.3 6.7 5.8 5.3 4.4 4.5 4.4 4.5 4.4 3.6 3.8 3.9	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.3 4.9 4.9 5.3 4.3 3.5 2.9 2.2 3.0 3.1 2.0 2.6	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5 5.1 5.9 5.1 4.6 4.3 3.8 3.4 3.8 3.0 3.0 3.0 3.4	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9 9.2 9.4 10.8 13.9 15.3 15.8 16.1 15.8 14.9 15.1 15.8 16.0	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 9.4 7.0 5.7 5.8 7.3 10.6 13.4 14.9 15.5 14.5 12.6 12.4 13.9 14.6	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 7.6 7.8 9.0 12.2 14.4 15.3 15.7 15.3 13.8 13.8 14.7 15.1 15.5 16.1 17.6	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7 7.5 6.3 5.3 6.7 5.8 5.3 5.3 4.4 4.4 4.5 4.4 3.6	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 59.7 6.7 6.3 4.9 4.9 5.3 3.8 3.5 2.9 2.2 3.0 3.1 2.0 2.0	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5 5.1 5.9 5.1 4.6 4.3 3.8 3.4 3.8 3.0 3.0	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9 9.2 9.4 10.8 13.9 15.3 15.8 16.1 15.8 16.1 15.8 16.0	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 11.8 9.4 7.0 5.7 5.8 7.3 10.6 13.4 14.9 15.5 14.5 12.6 12.4 13.9 14.6 15.9 16.4	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 8.5 7.6 7.8 9.0 12.2 14.4 15.3 15.7 15.3 13.8 14.7 15.1 15.5 16.1 17.6	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7 7.5 6.3 5.3 6.7 5.8 5.3 5.3 4.4 4.5 4.4 3.6 3.8 3.9 4.3	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.7 6.3 4.9 5.3 3.8 3.5 2.9 2.2 2.0 2.0 2.0 2.6 2.6	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5 5.1 5.9 5.1 4.6 4.3 3.8 3.8 3.0 3.0 3.0 3.0 3.1 3.5	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9 9.2 9.4 10.8 13.9 15.8 16.1 15.8 16.1 15.8 16.0 16.2 16.5 18.8 18.5 18.8	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 11.8 9.4 7.0 5.7 5.8 7.3 10.6 13.4 14.9 15.5 14.5 12.6 12.4 13.9 14.6 15.9 16.4 17.2 17.7	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 7.6 7.8 9.0 12.2 14.4 15.3 15.7 15.3 13.8 14.7 15.1 15.5 16.1 17.6 17.8 18.2	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7 7.5 6.3 5.3 6.7 5.8 5.3 5.3 4.4 4.4 4.5 4.4 3.6 3.8 3.9 4.3 4.9 5.1	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.7 6.3 4.9 5.3 3.8 3.5 2.9 2.2 3.0 3.1 2.0 2.6 2.6 2.6 3.6 4.2 3.1	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5 5.1 5.9 5.1 4.6 4.3 3.8 3.8 3.0 3.0 3.0 3.4 3.5 4.2 4.7 3.9	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9 9.2 9.4 10.8 13.9 15.3 15.8 16.1 15.8 16.1 15.8 16.0 16.2 16.5 18.8 18.5 18.8	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 11.8 9.4 7.0 5.7 5.8 7.3 10.6 13.4 14.9 15.5 14.5 12.6 12.4 13.4 13.9 14.6 15.9 16.4 17.2 17.7	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 8.5 7.6 7.8 9.0 12.2 14.4 15.3 15.7 15.3 13.8 14.7 15.1 15.5 16.1 17.6 17.8 18.2	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7 7.5 6.3 5.3 6.7 5.8 5.3 4.4 4.5 4.4 3.6 3.8 3.9 4.3 4.9 5.1	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.7 6.3 4.9 5.3 3.8 3.5 5.2 9 2.2 2.3 0.0 3.1 2.0 2.6 3.6 4.2	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5 5.1 5.9 5.1 4.6 4.3 3.8 3.8 3.0 3.0 3.0 3.4 3.5 4.2 4.7	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.2 9.4 10.8 13.9 15.8 16.1 15.8 16.1 15.8 16.0 16.2 16.5 18.8 18.5 18.5 18.5 18.5 18.5	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 11.8 9.4 7.0 5.7 5.8 7.3 10.6 13.4 14.9 15.5 14.5 12.6 12.4 13.9 14.6 15.9 16.9 17.2 17.7	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 7.6 7.8 9.0 12.2 14.4 15.3 15.7 15.3 13.8 14.7 15.1 17.6 17.8 18.2 17.8 17.5 17.8 17.8 17.5 17.8	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 6.3 5.3 6.7 7.5.8 5.3 5.3 4.4 4.5 4.4 3.6 3.8 3.9 4.3 4.9 5.1 4.7 4.6 6.4 5.2	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.7 6.3 4.9 5.3 3.8 3.5 2.9 2.2 3.0 3.1 2.0 2.6 2.6 2.6 2.6 2.6 3.6 4.2 3.1 2.9 3.6 3.6 3.6	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5 5.1 5.9 5.1 4.6 4.3 3.8 3.8 3.0 3.0 3.4 3.5 4.2 4.7 3.9 3.7 4.8 4.3	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9 9.2 9.4 10.8 13.9 15.3 16.1 15.8 16.1 15.8 16.0 16.2 16.5 18.8 18.5 18.8 18.5 18.3	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 11.8 9.4 7.0 5.7 5.8 7.3 10.6 13.4 14.9 15.5 14.5 12.6 12.4 13.4 13.9 14.6 15.9 16.4 17.2 17.7	MEAN R 18.1 18.8 19.6 18.1 15.8 13.3 10.5 8.5 7.6 7.8 9.0 12.2 14.4 15.3 15.7 15.3 13.8 14.7 15.1 17.6 17.8 18.2 17.8 17.5	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7 7.5 6.3 5.3 6.7 5.8 5.3 4.4 4.5 4.4 3.6 3.8 3.9 4.3 4.9 5.1 4.7 4.6 6.4	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.7 6.3 4.9 5.3 4.3 3.8 3.5 2.9 2.2 2.3 0.0 3.1 2.0 0 2.6 6.3 6.4 4.2 3.1 2.9 3.6	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5 5.1 5.9 5.1 4.6 4.3 3.8 3.8 3.0 3.0 3.4 3.8 3.8 3.0 3.7 4.2 4.7	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	19.9 20.3 21.3 21.2 16.6 14.8 11.8 9.9 9.2 9.4 10.8 13.9 15.8 16.1 15.8 14.9 15.1 15.8 16.0 16.2 16.5 18.8 18.8 18.8 18.8 18.8 18.3 18.2 17.8	MIN OCTOBE 16.1 17.3 17.8 16.6 14.8 11.8 9.4 7.0 5.7 5.8 7.3 10.6 13.4 14.9 15.5 14.5 12.6 12.4 13.9 14.6 15.9 16.4 17.2 17.3 16.9 17.2 16.3 16.7	MEAN R 18.1 18.8 19.6 18.1 15.8 10.5 8.5 7.6 6 7.8 9.0 12.2 14.4 15.3 15.7 15.3 13.8 14.7 15.1 17.6 17.8 18.2 17.8 17.1 17.6	MAX 18.9 17.7 14.5 13.1 13.3 14.4 12.5 9.7 7.5 6.3 5.3 6.7 5.8 5.3 4.4 4.5 4.4 3.6 3.8 3.9 4.3 4.9 5.1 4.7 4.6 6.4 5.2	MIN NOVEMBER 17.7 14.5 13.0 10.9 11.4 12.5 9.7 6.3 4.9 4.9 5.3 4.3 3.5 2.9 2.2 3.0 3.1 1 2.0 2.6 2.6 3.6 4.2 3.1 2.9 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6	MEAN 18.3 16.0 13.7 12.2 12.1 13.8 11.0 7.8 7.0 5.5 5.1 5.9 5.1 4.6 4.3 3.8 3.4 3.8 3.0 3.0 3.4 3.5 4.7 4.8 4.7	MAX DI	MIN ECEMBER	MEAN	MAX	JANUARY	

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06892440 CEDAR CREEK AT HIGHWAY 56 AT OLATHE, KS--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		TEMPER	RATURE,	WATER (DEC	. C), W₽	ATER YEAR	OCTOBER :	2000 10 1	SEPTEMBER	2001		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1				3.1	1.4	2.3	11.0	8.9	9.8	24.2	18.5	21.2
2				4.1 5.7	2.3 1.8	3.0 3.6	11.2 11.5	8.5 10.4	9.7 11.0	22.8 22.2	19.9 20.2	21.6 21.0
4				6.0	2.3	4.3	12.0	10.1	10.9	22.6	19.3	20.8
5				5.9	2.5	4.3	16.2	12.0	13.6	21.6	19.8	20.6
6 7				5.4 6.8	2.6 4.0	4.2 5.4	17.6 21.4	16.2 15.2	16.8 18.1	20.8 20.8	19.0 17.9	19.9 19.5
8				7.2	3.7	5.4	21.7	15.1	18.2	21.2	17.0	19.0
9 10				6.9 8.8	3.4 4.9	5.2 6.7	24.3 21.2	18.7 18.9	21.0 19.5	23.3 23.4	17.7 19.8	19.8 21.5
11 12				8.1 11.0	6.9 7.4	7.3 8.7	21.1 18.3	17.0 13.5	19.2 16.1	22.8 22.4	20.7 18.7	21.7 20.4
13 14				11.9 11.9	7.3 8.4	9.2 10.0	18.0 19.2	13.6 15.7	16.2 17.4	23.1 24.5	18.0 20.3	20.5 22.2
15				11.5	6.1	9.2	19.5	15.8	17.3	25.7	21.4	23.4
16				6.7	5.3	5.9	16.7	12.1	13.6	27.0	22.2	24.5
17 18				9.5 9.1	4.3 4.6	6.6 7.0	13.1 15.0	9.5 10.1	11.2 12.4	26.1 23.3	22.1 21.8	24.2 22.4
19				10.0	6.3	8.3	16.1	12.6	14.4	23.0	20.0	21.7
20				10.1	5.7	8.4	19.7	15.9	17.5	22.8	20.2	22.2
21				10.0	7.8	9.2	21.6	18.4	19.7	21.4	18.3	19.8
22 23				12.2 13.3	9.0 9.0	10.3 11.0	20.0 19.2	19.0 15.5	19.6 17.2	18.3 19.8	16.0 15.1	17.2 16.7
24 25				11.8 9.6	8.4	9.9 8.0	19.7 21.2	11.9	15.6	17.0	14.7	15.6 15.5
					6.2			13.9	17.3	18.1	13.4	
26 27	5.0	1.0	2.9	9.9 10.3	5.2 5.4	7.4 7.4	22.5 23.8	15.1 17.8	18.9 20.6	20.0 22.4	14.1 15.9	16.9 18.8
28	2.7	.5	1.6	8.0	7.3	7.7	24.1	18.2	21.1	23.0	18.0	20.6
29 30				10.3 12.6	7.2 8.3	8.4 10.2	24.3 21.8	18.4 18.7	21.1 20.4	21.5 19.9	19.2 18.6	20.1 19.1
31				13.9	10.3	11.5				19.4	16.3	17.8
MONTH	5.0	.5	2.2	13.9	1.4	7.3	24.3	8.5	16.5	27.0	13.4	20.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN		MIN AUGUST	MEAN		MIN SEPTEMBE	
		JUNE			JULY			AUGUST			SEPTEMBE	IR.
1 2	19.8 19.9	JUNE 7.0 16.1	16.3 17.8	29.4 28.6	JULY 24.6 24.6	26.8 26.6	32.4 32.0	AUGUST 27.6 27.9	29.7 29.8	24.7 26.6	21.9 21.3	23.3 23.7
1	19.8	JUNE 7.0	16.3	29.4	JULY 24.6	26.8	32.4	AUGUST 27.6	29.7	24.7	SEPTEMBE	23.3
1 2 3	19.8 19.9 18.8	JUNE 7.0 16.1 16.4	16.3 17.8 17.2	29.4 28.6 30.5	JULY 24.6 24.6 24.8	26.8 26.6 27.4	32.4 32.0 31.4	AUGUST 27.6 27.9 27.8	29.7 29.8 29.5	24.7 26.6 26.9	21.9 21.3 22.5	23.3 23.7 24.6
1 2 3 4 5	19.8 19.9 18.8 16.4 18.3	JUNE 7.0 16.1 16.4 14.4 16.0	16.3 17.8 17.2 15.5 16.9	29.4 28.6 30.5 30.5 30.0	JULY 24.6 24.6 24.8 25.2 26.6	26.8 26.6 27.4 27.9 28.1	32.4 32.0 31.4 32.4 32.0	AUGUST 27.6 27.9 27.8 28.6 27.2 26.7	29.7 29.8 29.5 30.2 29.5	24.7 26.6 26.9 26.4 26.0	21.9 21.3 22.5 23.1 22.5	23.3 23.7 24.6 24.6 24.2
1 2 3 4 5	19.8 19.9 18.8 16.4 18.3 23.2 23.2	7.0 16.1 16.4 14.4 16.0 17.5 20.4	16.3 17.8 17.2 15.5 16.9	29.4 28.6 30.5 30.5 30.0	JULY 24.6 24.6 24.8 25.2 26.6 25.0 26.7	26.8 26.6 27.4 27.9 28.1 27.8 29.5	32.4 32.0 31.4 32.4 32.0 31.5	AUGUST 27.6 27.9 27.8 28.6 27.2 26.7 25.6	29.7 29.8 29.5 30.2 29.5	24.7 26.6 26.9 26.4 26.0 24.7 26.0	21.9 21.3 22.5 23.1 22.5 22.8 22.1	23.3 23.7 24.6 24.6 24.2 24.1 24.6
1 2 3 4 5 6 7 8 9	19.8 19.9 18.8 16.4 18.3 23.2 23.2 21.8 24.1	7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1	16.3 17.8 17.2 15.5 16.9 19.7 21.8 20.7 21.4	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3	JULY 24.6 24.6 24.8 25.2 26.6 25.0 26.7 27.7 27.6	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 33.0	27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4	29.7 29.8 29.5 30.2 29.5 28.9 28.0 28.4 29.7	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8 23.5	21.9 21.3 22.5 23.1 22.5 22.8 22.1 22.1 20.9	23.3 23.7 24.6 24.6 24.2 24.1 24.6 23.3 22.1
1 2 3 4 5 6 7 8	19.8 19.9 18.8 16.4 18.3 23.2 23.2 21.8 24.1 25.1	JUNE 7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1 21.3	16.3 17.8 17.2 15.5 16.9 19.7 21.8 20.7 21.4 23.1	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3 31.3	JULY 24.6 24.8 25.2 26.6 25.0 26.7 27.7 27.6 24.3	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5 29.6	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 33.0 29.1	27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4 24.9	29.7 29.8 29.5 30.2 29.5 28.9 28.0 28.4 29.7 26.6	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8	21.9 21.3 22.5 23.1 22.5 22.1 22.1 20.9 19.0	23.3 23.7 24.6 24.6 24.2 24.1 24.6 23.3
1 2 3 4 5 6 7 8 9 10	19.8 19.9 18.8 16.4 18.3 23.2 23.2 21.8 24.1 25.1	JUNE 7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1 21.3	16.3 17.8 17.2 15.5 16.9 19.7 21.8 20.7 21.4 23.1 25.0	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3 31.3	JULY 24.6 24.8 24.8 25.2 26.6 25.0 26.7 27.7 27.6 24.3 24.5	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5 29.6	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 33.0 29.1	27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4 24.9	29.7 29.8 29.5 30.2 29.5 28.9 28.0 28.4 29.7 26.6	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8 23.5 24.0	21.9 21.3 22.5 23.1 22.5 22.8 22.1 22.1 20.9 19.0	23.3 23.7 24.6 24.6 24.2 24.1 24.6 23.3 22.1 21.3
1 2 3 4 5 6 7 8 9 10 11 12 13	19.8 19.9 18.8 16.4 18.3 23.2 21.8 24.1 25.1 26.4 27.1 26.4	JUNE 7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1 21.3 23.6 24.0 24.4	16.3 17.8 17.2 15.5 16.9 19.7 21.8 20.7 21.4 23.1 25.0 25.4 25.3	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3 31.3	JULY 24.6 24.6 24.8 25.2 26.6 25.0 26.7 27.7 27.6 24.3 24.5 25.5 23.3	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5 29.6 28.5 26.9 24.8	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 33.0 29.1 27.2 28.0 28.2	AUGUST 27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4 24.9 23.3 22.2 23.5	29.7 29.8 29.5 30.2 29.5 28.9 28.0 28.4 29.7 26.6 25.0 24.9 25.5	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8 23.5 24.0 23.3 22.4	21.9 21.3 22.5 23.1 22.5 22.8 22.1 22.1 20.9 19.0 19.2 18.2	23.3 23.7 24.6 24.6 24.2 24.1 24.6 23.3 22.1 21.3 20.1
1 2 3 4 5 6 7 8 9 10 11 12 13 14	19.8 19.9 18.8 16.4 18.3 23.2 23.2 21.8 24.1 25.1 26.4 27.1 26.4 27.1 26.5	JUNE 7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1 21.3 23.6 24.0 24.4	16.3 17.8 17.2 15.5 16.9 19.7 21.8 20.7 21.4 23.1 25.0 25.4 25.3 24.2	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3 31.3	JULY 24.6 24.8 25.2 26.6 25.0 26.7 27.6 24.3 24.5 25.5 23.3 22.6	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5 29.6 28.5 26.9 24.8 24.7	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 33.0 29.1 27.2 28.0 28.2 27.9	AUGUST 27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4 24.9 23.3 22.2 23.5 22.3	29.7 29.8 29.5 30.2 29.5 28.9 28.0 28.4 29.7 26.6 25.0 24.9 25.5 24.8	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8 23.5 24.0 23.3 22.4 22.1	21.9 21.3 22.5 23.1 22.5 22.8 22.1 20.9 19.0 19.2 18.2 18.1 19.0	23.3 23.7 24.6 24.6 24.2 24.1 24.6 23.3 22.1 21.3 21.1 20.2 20.1 20.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	19.8 19.9 18.8 16.4 18.3 23.2 21.2 21.8 24.1 25.1 26.4 27.1 26.4 25.5 24.4	JUNE 7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1 21.3 23.6 24.0 24.4 22.0 20.9	16.3 17.8 17.5 15.5 16.9 19.7 21.8 20.7 21.4 23.1 25.0 25.4 25.3 24.2 22.5	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3 31.3 30.4 29.0 26.7 27.2 26.8	JULY 24.6 24.6 24.8 25.2 26.6 25.0 26.7 27.7 27.6 24.3 24.5 23.3 22.6 22.3	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5 29.6 28.5 26.9 24.8 24.7 24.4	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 32.0 27.2 28.0 28.2 27.9 25.6	27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4 24.9 23.3 22.2 23.5 22.3	29.7 29.8 29.5 30.2 29.5 28.9 28.0 28.4 29.7 26.6 25.0 24.9 25.5 24.8 23.5	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8 23.5 24.0 23.3 22.4 22.1 21.1 19.7	21.9 21.3 22.5 23.1 22.5 22.8 22.1 22.1 20.9 19.0 19.2 18.2 18.1 19.0 18.5	23.3 23.7 24.6 24.6 24.2 24.1 24.6 23.3 22.1 21.3 21.1 20.2 20.1 20.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	19.8 19.9 18.8 16.4 18.3 23.2 21.8 24.1 25.1 26.4 27.1 26.5 24.4 26.3 27.2	JUNE 7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1 21.3 23.6 24.0 24.4 22.0 20.9 21.9 21.9	16.3 17.8 17.2 15.5 16.9 19.7 21.8 20.7 21.4 23.1 25.0 25.4 25.3 24.2 22.5	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3 31.3 30.4 29.0 26.7 27.2 26.8	JULY 24.6 24.8 25.2 26.6 25.0 26.7 27.7 27.7 27.6 24.3 24.5 25.5 23.3 22.6 22.3	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5 29.6 28.5 26.9 24.8 24.7 24.4	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 33.0 29.1 27.2 28.0 28.2 27.9 25.6	AUGUST 27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4 24.9 23.3 22.2 23.5 22.3 22.1 21.1 21.6	29.7 29.8 29.5 30.2 29.5 28.9 28.0 28.4 29.7 26.6 25.0 24.9 25.5 24.8 23.5	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8 23.5 24.0 23.3 22.4 22.1 21.1 19.7	21.9 21.3 22.5 23.1 22.5 22.8 22.1 22.1 20.9 19.0 19.2 18.2 18.1 19.0 18.5	23.3 23.7 24.6 24.6 24.2 24.1 24.6 23.3 22.1 21.3 21.1 20.2 20.1 20.2 19.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	19.8 19.9 18.8 16.4 18.3 23.2 21.8 24.1 25.1 26.4 27.1 26.4 25.5 24.4 26.3 27.2 27.4	JUNE 7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1 21.3 23.6 24.0 20.9 21.9 21.9 22.5	16.3 17.8 17.5 15.5 16.9 19.7 21.8 20.7 21.4 23.1 25.0 25.4 25.3 24.2 22.5 23.7 24.3 24.8	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3 31.3 30.4 29.0 26.7 27.2 26.8 27.4 29.7 30.8	JULY 24.6 24.6 24.8 25.2 26.6 25.0 26.7 27.7 27.6 24.3 24.5 23.3 22.6 22.3 23.2 24.7 26.2	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5 29.6 28.5 26.9 24.8 24.7 24.4	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 33.0 29.1 27.2 28.0 28.2 27.9 25.6	27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4 24.9 23.3 22.2 23.5 22.3 22.1	29.7 29.8 29.5 30.2 29.5 28.9 28.0 28.4 29.7 26.6 25.0 24.9 25.5 24.8 23.5	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8 23.5 24.0 23.3 22.4 22.1 21.1 19.7 20.7 21.2 20.8	21.9 21.3 22.5 23.1 22.5 22.8 22.1 22.1 20.9 19.0 19.2 18.2 18.1 19.0 18.5	23.3 23.7 24.6 24.6 24.2 24.1 24.6 23.3 22.1 21.3 21.1 20.2 20.1 20.2 19.0 19.2 20.4 20.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	19.8 19.9 18.8 16.4 18.3 23.2 21.8 24.1 25.1 26.4 27.1 26.5 24.4 26.3 27.2	JUNE 7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1 21.3 23.6 24.0 24.4 22.0 20.9 21.9 21.9	16.3 17.8 17.2 15.5 16.9 19.7 21.8 20.7 21.4 23.1 25.0 25.4 25.3 24.2 22.5	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3 31.3 30.4 29.0 26.7 27.2 26.8	JULY 24.6 24.8 25.2 26.6 25.0 26.7 27.7 27.7 27.6 24.3 24.5 25.5 23.3 22.6 22.3	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5 29.6 28.5 26.9 24.8 24.7 24.4	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 33.0 29.1 27.2 28.0 28.2 27.9 25.6	AUGUST 27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4 24.9 23.3 22.2 23.5 22.3 22.1 21.1 21.6 20.9 19.6	29.7 29.8 29.5 30.2 29.5 28.9 28.0 28.4 29.7 26.6 25.0 24.9 25.5 24.8 23.5	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8 23.5 24.0 23.3 22.4 22.1 21.1 19.7	21.9 21.3 22.5 23.1 22.5 22.8 22.1 22.1 20.9 19.0 19.2 18.2 18.1 19.0 18.5	23.3 23.7 24.6 24.6 24.2 24.1 24.6 23.3 22.1 21.3 21.1 20.2 20.1 20.2 19.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	19.8 19.9 18.8 16.4 18.3 23.2 23.2 21.8 24.1 25.1 26.4 27.4 25.5 24.4 26.3 27.2 27.4 25.1 22.4	JUNE 7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1 21.3 23.6 24.0 24.4 22.0 20.9 21.9 21.9 22.5 22.3	16.3 17.8 17.2 15.5 16.9 19.7 21.4 23.1 25.0 25.4 25.3 24.2 22.5 23.7 24.8 23.1	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3 31.3 30.4 29.0 26.7 27.2 26.8 27.4 29.7 30.8 30.6	JULY 24.6 24.8 25.2 26.6 25.0 26.7 27.7 27.6 24.3 24.5 25.3 22.6 22.3 23.2 24.7 26.2 26.8	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5 29.6 28.5 24.8 24.7 24.4 25.0 26.9 28.2 28.6	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 33.0 29.1 27.2 28.0 28.2 27.9 25.6 26.7 24.0 26.7 26.7	AUGUST 27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4 24.9 23.3 22.2 23.5 22.3 22.1 21.1 21.6 20.9 19.6	29.7 29.8 29.5 30.2 29.5 28.9 28.0 28.4 29.7 26.6 25.0 24.9 25.5 24.8 23.5 23.6 22.7 23.3	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8 23.5 24.0 23.3 22.4 21.1 19.7 20.7 21.2 20.8 20.5	21.9 21.3 22.5 23.1 22.5 22.8 22.1 20.9 19.0 19.2 18.2 18.1 19.0 18.5 17.8 18.0 19.3 18.4	23.3 23.7 24.6 24.6 24.2 24.1 24.6 23.3 22.1 21.3 21.1 20.2 19.0 19.2 20.4 20.2 19.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	19.8 19.9 18.8 16.4 18.3 23.2 21.8 24.1 25.1 26.4 27.1 26.5 24.4 25.5 24.4 26.3 27.2 27.4 22.4 22.4	JUNE 7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1 21.3 23.6 24.0 24.4 22.0 20.9 21.9 21.9 22.5 22.3 19.5	16.3 17.8 17.2 15.5 16.9 19.7 21.8 20.7 21.4 23.1 25.0 25.4 25.3 24.2 22.5 23.7 24.3 24.2 22.5	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3 31.3 30.4 29.0 26.7 27.2 26.8 27.4 29.7 30.8 30.6 32.1	JULY 24.6 24.8 25.2 26.6 25.0 26.7 27.7 27.6 24.3 24.5 25.5 23.3 22.6 22.3 23.2 24.7 26.8 27.3 28.0	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5 29.6 28.5 24.7 24.4 25.0 26.9 28.2 28.6 29.5	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 33.0 29.1 27.2 28.0 28.2 27.9 25.6 26.7 24.0 26.7 24.0 26.7 25.9	AUGUST 27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4 24.9 23.3 22.2 23.5 22.3 22.1 21.1 21.6 20.9 19.6 21.0 22.6 24.3	29.7 29.8 29.5 30.2 29.5 28.0 28.4 29.7 26.6 25.0 24.9 25.5 24.8 23.5 23.6 22.5 23.2 22.7 23.3	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8 23.5 24.0 23.3 22.4 22.1 19.7 20.7 21.2 20.8 20.5 21.2	21.9 21.3 22.5 23.1 22.5 22.8 22.1 20.9 19.0 19.2 18.2 18.1 19.0 18.5 17.8 18.0 19.3 18.4 18.6	23.3 23.7 24.6 24.6 24.2 24.1 24.6 23.3 22.1 21.3 21.1 20.2 20.1 20.2 19.0 19.2 20.4 20.2 19.9 21.0 20.1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	19.8 19.9 18.8 16.4 18.3 23.2 23.2 21.8 24.1 25.1 26.4 27.4 25.5 24.4 26.3 27.2 27.4 22.4 23.5 24.1 25.1	JUNE 7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1 21.3 23.6 24.0 20.9 21.9 21.9 22.5 22.3 19.5	16.3 17.8 17.2 15.5 16.9 19.7 21.4 23.1 25.0 25.4 22.5 22.5 23.7 24.8 24.8 24.8 25.3 24.2 22.5 21.0 25.4 21.0 25.4 21.0 25.4 21.0 25.4 21.0 25.4 25.4 26.0 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3 31.3 30.4 29.0 26.7 27.2 26.8 27.4 29.7 30.6 32.1 33.0 33.3 32.0 33.3	JULY 24.6 24.8 25.2 26.6 25.0 26.7 27.7 27.6 24.3 24.5 25.3 22.6 22.3 23.2 24.7 26.8 27.2 27.3 28.0 28.1 28.2	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5 29.6 28.5 24.7 24.4 25.0 26.9 28.6 29.5 29.5	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 33.0 29.1 27.2 28.0 28.2 27.9 25.6 26.7 24.0 26.7 26.1 25.9	AUGUST 27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4 24.9 23.3 22.2 23.5 22.3 22.1 21.1 21.6 20.9 19.6 21.0 22.6 24.3 22.4 24.0	29.7 29.8 29.5 30.2 29.5 28.9 28.0 28.4 29.7 26.6 25.0 24.9 25.5 24.8 23.5 23.6 22.5 23.2 22.7 23.3	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8 23.5 24.0 23.3 22.4 21.1 19.7 20.7 21.2 20.8 20.5 21.2	21.9 21.3 22.5 23.1 22.5 22.8 22.1 22.1 20.9 19.0 19.2 18.1 19.0 18.5 17.8 18.0 19.3 18.4 18.6 19.9 18.8 18.6 19.9	23.3 23.7 24.6 24.6 24.2 24.1 24.6 23.3 22.1 21.3 21.1 20.2 20.1 20.2 19.0 19.2 20.4 20.2 19.9 21.0 20.1 19.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	19.8 19.9 18.8 16.4 18.3 23.2 21.8 24.1 25.1 26.4 27.1 26.4 27.1 26.4 27.2 27.4 25.1 22.4 23.2 24.4	JUNE 7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1 21.3 23.6 24.0 24.4 22.0 20.9 21.9 21.9 22.5 22.3 19.5	16.3 17.8 17.2 15.5 16.9 19.7 21.8 20.7 21.4 23.1 25.0 25.4 25.3 24.2 22.5 23.7 24.8 23.1 20.9	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3 31.3 30.4 29.0 26.7 27.2 26.8 27.4 29.7 30.8 30.6 32.1	JULY 24.6 24.8 24.8 25.2 26.6 25.0 26.7 27.7 27.6 24.3 24.5 25.5 23.3 22.6 22.3 23.2 24.7 26.2 26.8 27.2 27.3 28.0 28.1	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5 29.6 28.5 24.8 24.7 24.4 25.0 28.2 28.6 29.5 29.5	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 33.0 29.1 27.2 28.0 28.2 27.9 25.6 26.7 26.7 26.1 25.9	27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4 24.9 23.3 22.2 23.5 22.3 22.1 21.1 21.6 20.9 19.6 21.0	29.7 29.8 29.5 30.2 29.5 28.9 28.0 28.4 29.7 26.6 25.0 24.9 25.5 24.8 23.5 23.6 22.5 23.2 22.7 23.3	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8 23.5 24.0 23.3 22.4 22.1 21.1 21.1 21.2 20.8 20.5 21.2 22.2 21.8 19.9	21.9 21.3 22.5 23.1 22.5 22.8 22.1 22.1 22.1 22.1 22.1 22.1 22.1	23.3 23.7 24.6 24.6 24.2 24.1 24.6 23.3 22.1 21.3 21.1 20.2 20.1 20.2 19.0 19.2 20.4 20.2 19.5 19.9
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	19.8 19.8 19.8 16.4 18.3 23.2 21.8 24.1 25.1 26.4 27.1 26.5 25.5 24.4 27.2 27.4 22.4 22.4 22.4 23.5 24.5 24.5 27.7 28.7 29.7 29.7 29.7 29.7 29.7 29.7 29.7 29	JUNE 7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1 21.3 23.6 24.0 24.4 22.0 20.9 21.9 21.9 22.5 22.3 19.5	16.3 17.8 17.2 15.5 16.9 19.7 21.8 20.7 21.4 23.1 25.0 25.4 25.3 24.2 22.5 23.7 24.3 24.8 23.1 20.9 21.4 22.1 24.4 25.6	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3 31.3 30.4 29.0 26.7 27.2 26.8 27.4 29.7 30.8 30.6 32.1 33.3 33.3 30.6 32.1 33.0 33.3 30.6 30.6 30.5 30.5 30.5 30.5 30.5 30.5 30.5 30.5	JULY 24.6 24.8 25.2 26.6 25.0 26.7 27.7 27.6 24.3 24.5 25.5 23.3 22.6 22.3 23.2 24.7 26.2 26.8 27.3 28.0 28.1 28.2 27.3 26.2 27.3	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5 29.6 28.5 26.9 24.8 24.7 24.4 25.0 26.9 28.6 29.5 30.5 30.5 29.5	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 33.0 29.1 27.2 28.0 28.2 27.9 25.6 26.7 24.0 26.7 26.1 25.9 30.0 29.3 25.7 26.2 26.9	AUGUST 27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4 24.9 23.3 22.2 23.5 22.1 21.1 21.6 20.9 19.6 21.0 22.6 24.1 24.0 23.5	29.7 29.8 29.5 30.2 29.5 28.0 28.4 29.7 26.6 25.0 24.9 25.5 24.8 23.5 23.6 22.5 23.2 22.7 23.3 26.0 25.7 25.6 25.7	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8 23.5 24.0 23.3 22.4 22.1 21.1 19.7 20.7 21.2 20.8 20.5 21.2 21.2 21.2 21.2 21.2 21.1 21.1 21	21.9 21.3 22.5 23.1 22.5 22.8 22.1 22.1 20.9 19.0 19.2 18.2 18.1 19.0 18.5 17.8 18.0 19.3 18.4 18.6 19.9 18.8 18.6 16.0 13.6	23.3 23.7 24.6 24.2 24.1 24.6 23.3 22.1 21.3 21.1 20.2 20.1 20.2 19.0 19.2 20.4 20.2 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	19.8 19.9 18.8 16.4 18.3 23.2 21.8 24.1 25.1 26.4 27.1 26.5 24.4 25.5 24.4 27.2 27.4 22.4 23.5 24.5 22.4 22.4 23.5 24.1 22.4 23.5 24.1 25.1 26.4 27.1 26.4 27.1 26.4 27.1 27.1 28.5 29.7 29.7 29.7 29.7 29.7 29.7 29.7 29.7	JUNE 7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1 21.3 23.6 24.0 20.9 21.9 22.5 22.3 19.5 19.4 19.6 19.9 22.7 24.1 24.0 23.2 22.8 23.0 25.0	16.3 17.8 17.2 15.5 16.9 19.7 21.4 23.1 25.0 25.4 25.3 24.2 22.5 23.7 24.3 24.3 24.3 22.1 22.1 24.4 25.6	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3 31.3 30.4 29.0 26.7 27.2 26.8 27.4 29.7 30.8 32.1 33.0 32.0 33.3 32.0 31.8 30.0	JULY 24.6 24.8 25.2 26.6 25.0 26.7 27.7 27.6 24.3 24.5 25.5 23.3 22.6 22.3 23.2 24.7 26.8 27.3 28.0 28.1 28.2 27.3 28.0 28.1 28.2 27.3	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5 29.6 28.5 24.7 24.4 25.0 26.9 28.6 29.5 30.2 29.5 30.2 28.6 29.5 30.2 29.5 30.2 28.6 29.5 30.2 30.5 30.5 30.5 30.5 30.5 30.5 30.5 30.5	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 33.0 29.1 27.2 28.0 26.7 24.0 26.7 24.0 26.7 25.6 30.0 29.3 25.7 26.2 26.9 27.4 27.5 28.8 27.5 28.8	AUGUST 27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4 24.9 23.3 22.2 23.5 22.1 21.1 21.6 20.9 19.6 21.0 22.6 24.3 22.4 24.0 23.5 24.1 22.3 23.2 24.0 23.5	29.7 29.8 29.5 30.2 29.5 28.9 28.0 28.4 29.7 26.6 25.0 24.9 25.5 23.2 22.7 23.3 26.0 26.4 24.2 25.0 25.7 25.6 26.4 24.2 25.7 26.6	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8 23.5 24.0 23.3 22.4 22.1 21.1 19.7 20.7 21.2 20.8 20.5 21.2 22.2 21.8 19.9 18.6 17.1	21.9 21.3 22.5 23.1 22.5 22.8 22.1 20.9 19.0 19.2 18.2 18.1 19.0 18.5 17.8 18.0 19.3 18.6 19.3 18.6 19.3 14.5 12.6 13.3 14.5	23.3 23.7 24.6 24.6 24.2 24.1 24.6 23.3 22.1 21.3 21.1 20.2 20.1 20.2 19.0 19.2 20.4 20.2 19.0 19.3 17.6 15.3 14.8 15.4 16.3 16.3 16.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	19.8 19.9 18.8 16.4 18.3 23.2 23.2 21.8 24.1 25.1 26.4 27.4 25.5 24.4 25.5 24.4 25.1 22.4 22.4 23.5 24.2 27.4 25.1 22.4 23.5 24.5 27.4 27.9 27.5 28.5 27.9 27.5 27.9 27.5 28.9 27.5 28.9	JUNE 7.0 16.1 16.4 14.4 16.0 17.5 20.4 19.9 19.1 21.3 23.6 24.0 20.9 21.9 21.9 22.5 22.3 19.5 19.4 19.6 19.9 22.7 24.1 24.0 23.2 22.8 23.0 25.0	16.3 17.2 15.5 16.9 19.7 21.4 23.1 25.0 25.4 22.5 23.7 24.8 23.1 20.9 21.0 21.4 22.1 25.6 26.0 25.2 25.3 26.8	29.4 28.6 30.5 30.5 30.0 31.0 32.5 32.3 33.3 31.3 30.4 29.0 26.7 27.2 26.8 27.4 29.7 30.8 30.6 32.1 33.0 33.3 30.6 32.1 33.0 31.8 30.0	UULY 24.6 24.8 25.2 26.6 25.0 26.7 27.7 27.6 24.3 24.5 23.3 22.6 22.3 23.2 24.7 26.8 27.2 27.3 28.0 28.1 28.2 27.3 26.2 24.3	26.8 26.6 27.4 27.9 28.1 27.8 29.5 30.1 30.5 29.6 28.5 24.8 24.7 24.4 25.0 26.9 28.6 29.5 29.5 30.5 29.6 29.5 29.5 29.6 29.5 30.2 30.0 28.7 27.0 28.7 27.0 28.7 28.7 28.7 28.7 28.7 28.7 28.7 28.7	32.4 32.0 31.4 32.4 32.0 31.5 30.8 31.5 33.0 29.1 27.2 28.0 26.7 24.0 26.7 24.0 29.3 30.0 29.3 25.6 26.7 26.1 25.9 30.0 29.3 25.7 26.2 26.9 27.4 27.5 28.0 28.2 27.9 27.2 28.0 28.2 27.9 28.0 28.2 27.9 28.0 28.0 29.1 29.0 29.0 29.0 29.0 29.0 29.0 29.0 29.0	AUGUST 27.6 27.9 27.8 28.6 27.2 26.7 25.6 26.1 27.4 24.9 23.3 22.2 23.5 22.1 21.1 21.6 20.9 19.6 21.0 22.6 24.3 22.1 21.1 21.6 24.3 22.2 23.5	29.7 29.8 29.5 30.2 29.5 28.9 28.0 28.4 29.7 26.6 25.0 24.9 25.5 24.8 23.5 23.6 22.5 22.7 23.3 26.0 26.4 25.0 25.7 25.0 26.4 26.4 26.4 27.7 27.7 28.9 28.9 29.7 29.7 29.7 29.7 29.7 29.7 29.7 29	24.7 26.6 26.9 26.4 26.0 24.7 26.0 23.8 23.5 24.0 23.3 22.4 21.1 19.7 20.7 21.2 20.8 20.5 21.2 22.1 21.1 19.7	21.9 21.3 22.5 23.1 22.5 22.8 22.1 22.1 20.9 19.0 19.2 18.1 19.0 18.5 17.8 18.0 19.3 18.4 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8 18.6 19.9 18.8	23.3 23.7 24.6 24.6 24.2 24.1 24.6 23.3 22.1 21.3 21.1 20.2 20.1 20.2 19.0 19.2 20.4 20.2 19.5 19.9 21.0 20.1 19.3 17.6 15.3 14.8 15.4 16.3 16.3 16.3

06892440 CEDAR CREEK AT HIGHWAY 56 AT OLATHE, KS--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		OAI	ODIV DIDO	OLVED (MG/	L), WAII	IN IEAN C	CIOBER 2000	J IO SEE	FIENDER Z	001		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		N	OVEMBER		DI	ECEMBER			JANUARY	
		ОСТОВЫК			OVEREDER		2.	БСБГБББК			OTHVOTHCE	
1	9.8	6.5	7.9									
2 3	7.1 6.5	5.2 3.9	6.1 5.2									
4	4.8	3.6	4.3	7.8	3.0	4.6						
5	8.3	3.5	5.7	8.8	3.5	6.3						
6	9.0	6.2	7.7	9.8	8.1	9.1						
7	10.2	7.0	8.5	10.0	7.2	8.5						
8	10.9	8.2	9.6	11.9	6.9	9.3						
9			e9.6	11.7	6.5	9.4						
10				9.5	6.5	7.4						
11				12.8	6.2	8.0						
12				6.4	5.3	6.0						
13				12.2	4.5	7.0						
14 15	7.9	5.1	5.9	11.6 13.7	4.9 5.6	7.4 10.5						
13	7.5	3.1	3.5	13.7	3.0	10.5						
16	5.4	3.3	4.3	. = = =		e14.9						
17 18	4.6 4.3	3.2 2.9	4.0 3.9	15.0 13.6	13.6 12.9	14.2 13.3						
19	4.1	2.7	3.5	13.0	12.6	12.8						
20	4.0	2.7	3.5	12.8	12.3	12.5						
21 22	3.8	2.8	3.4	12.4 11.9	11.9 11.6	12.2 11.7						
23				11.7	11.3	11.7						
24				11.3	10.8	11.1						
25				10.8	10.3	10.6						
26				10.4	10.1	10.3						
27				10.2	9.8	10.3						
28				9.9	9.1	9.5						
29				9.2	8.9	9.1						
30 31												
31												
MONTH	10.9	2.7	5.8	15.0	3.0	9.9						
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN		MAX		MEAN	MAX		MEAN	MAX		MEAN
DAY		MIN FEBRUARY		MAX	MIN MARCH	MEAN		MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1		FEBRUARY		MAX 13.5		MEAN			MEAN	MAX 15.9		10.4
1 2		FEBRUARY		13.5 13.1	MARCH 13.1 12.5	13.4 12.9	16.1 16.5	APRIL 8.5 8.4	10.2 11.8	15.9 11.2	MAY 4.3 2.9	10.4 7.8
1 2 3		FEBRUARY	 	13.5 13.1 13.4	MARCH 13.1 12.5 12.2	13.4 12.9 13.0	16.1 16.5 	8.5 8.4	10.2 11.8 e12.9	15.9 11.2 11.5	MAY 4.3 2.9 4.4	10.4 7.8 7.2
1 2		FEBRUARY		13.5 13.1	MARCH 13.1 12.5	13.4 12.9	16.1 16.5	APRIL 8.5 8.4	10.2 11.8	15.9 11.2	MAY 4.3 2.9	10.4 7.8
1 2 3 4 5	 	FEBRUARY	 	13.5 13.1 13.4 12.9 13.1	MARCH 13.1 12.5 12.2 11.9 11.9	13.4 12.9 13.0 12.6 12.6	16.1 16.5 	8.5 8.4 	10.2 11.8 e12.9	15.9 11.2 11.5 7.7 7.3	MAY 4.3 2.9 4.4 4.4 3.9	10.4 7.8 7.2 6.6 5.4
1 2 3 4 5		FEBRUARY		13.5 13.1 13.4 12.9 13.1	MARCH 13.1 12.5 12.2 11.9 11.9	13.4 12.9 13.0 12.6 12.6	16.1 16.5 	8.5 8.4 	10.2 11.8 e12.9 	15.9 11.2 11.5 7.7 7.3	MAY 4.3 2.9 4.4 4.4 3.9 4.3	10.4 7.8 7.2 6.6 5.4
1 2 3 4 5	 	FEBRUARY	 	13.5 13.1 13.4 12.9 13.1 13.3 12.8	MARCH 13.1 12.5 12.2 11.9 11.9	13.4 12.9 13.0 12.6 12.6	16.1 16.5 14.6	8.5 8.4 6.4	10.2 11.8 e12.9 9.6	15.9 11.2 11.5 7.7 7.3 7.5 8.5	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6	10.4 7.8 7.2 6.6 5.4 5.8 7.4
1 2 3 4 5 6 7 8 9	====	FEBRUARY		13.5 13.1 13.4 12.9 13.1	MARCH 13.1 12.5 12.2 11.9 11.9	13.4 12.9 13.0 12.6 12.6	16.1 16.5 	8.5 8.4 	10.2 11.8 e12.9 	15.9 11.2 11.5 7.7 7.3	MAY 4.3 2.9 4.4 4.4 3.9 4.3	10.4 7.8 7.2 6.6 5.4
1 2 3 4 5	 	FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9	MARCH 13.1 12.5 12.2 11.9 11.9 12.1 11.7 11.7	13.4 12.9 13.0 12.6 12.6 12.2	16.1 16.5 14.6 15.8	8.5 8.4 6.4 7.8	10.2 11.8 e12.9 9.6 11.4	15.9 11.2 11.5 7.7 7.3 7.5 8.5	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5
1 2 3 4 5 6 7 8 9		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1	MARCH 13.1 12.5 12.2 11.9 11.7 11.7 11.7 11.3 11.2	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.2	16.1 16.5 14.6 15.8 14.7 8.9	8.5 8.4 6.4 7.8 7.6 6.8	10.2 11.8 e12.9 9.6 11.4 10.2	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8 9.1	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3
1 2 3 4 5 6 7 8 9	 	FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1	MARCH 13.1 12.5 12.2 11.9 11.9 12.1 11.7 11.7	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0	16.1 16.5 14.6 15.8 14.7	8.5 8.4 6.4 7.8 7.6	10.2 11.8 e12.9 9.6 11.4 10.2	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3
1 2 3 4 5 6 7 8 9 10		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3	MARCH 13.1 12.5 12.2 11.9 11.9 12.1 11.7 11.7 11.3 11.2 9.8 10.2 10.1	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0 10.8 11.4 11.9	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2	8.5 8.4 6.4 7.8 7.6 6.8 7.2 4.0 5.3	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.8	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8 9.1	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.7 4.7	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3 11.7	MARCH 13.1 12.5 12.2 11.9 11.9 12.1 11.7 11.3 11.2 9.8 10.2 10.1 7.8	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2	8.5 8.4 6.4 7.8 7.6 6.8 7.2 4.0 5.3 5.3	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.8 7.6 8.8	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8 9.1 8.7	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.0	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2 6.4
1 2 3 4 5 6 7 8 9 10		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3	MARCH 13.1 12.5 12.2 11.9 11.9 12.1 11.7 11.7 11.3 11.2 9.8 10.2 10.1	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0 10.8 11.4 11.9	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2	8.5 8.4 6.4 7.8 7.6 6.8 7.2 4.0 5.3	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.8	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8 9.1	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.7 4.7	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3 11.7 11.3	MARCH 13.1 12.5 12.2 11.9 11.9 11.7 11.7 11.3 11.2 9.8 10.2 10.1 7.8 7.9 10.8	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0 10.8 11.4 11.9 10.0 9.7	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2 15.0 10.3	APRIL 8.5 8.4 6.4 7.6 6.8 7.2 4.0 5.3 5.3 7.1 5.8	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.8 8.8 8.6 7.1	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8 9.1 8.7 8.5	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.7 4.7	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3 11.7 11.3	MARCH 13.1 12.5 12.2 11.9 11.9 11.7 11.7 11.7 11.3 11.2 9.8 10.2 10.1 7.8 7.9 10.8 9.9	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.2 12.3 12.0 10.8 11.4 11.9 10.0 9.7	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2 15.0 10.3	8.5 8.4 6.4 7.6 6.8 7.2 4.0 5.3 7.1 5.8 5.7	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.6 8.8 8.6 7.1 6.8	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8 9.1 8.7 8.5	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.0 4.7	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2 6.4 6.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3 11.7 11.3	MARCH 13.1 12.5 12.2 11.9 11.9 12.1 11.7 11.7 11.3 11.2 9.8 10.2 10.1 7.8 7.9 10.8 9.9 10.0	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0 10.8 11.4 11.9 10.0 9.7	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2 15.0 10.3	8.5 8.4 6.4 7.8 6.8 7.2 4.0 5.3 5.3 7.1 5.8 5.7 6.8	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.8 7.6 8.8 8.6	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8 9.1 8.7 8.5 	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.7 4.7 5.3	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2 6.4 6.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3 11.7 11.3	MARCH 13.1 12.5 12.2 11.9 11.9 11.7 11.7 11.7 11.3 11.2 9.8 10.2 10.1 7.8 7.9 10.8 9.9	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0 10.8 11.4 11.9 10.0 9.7	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2 15.0 10.3	8.5 8.4 6.4 7.6 6.8 7.2 4.0 5.3 7.1 5.8 5.7	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.6 8.8 8.6 7.1 6.8	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8 9.1 8.7 8.5	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.0 4.7	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2 6.4 6.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3 11.7 11.3	MARCH 13.1 12.5 12.2 11.9 11.9 12.1 11.7 11.7 11.3 11.2 9.8 10.2 10.1 7.8 7.9 10.8 9.9 10.0 9.8 9.6	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0 10.8 11.4 11.9 10.0 9.7	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2 15.0 10.3 9.3 7.4 10.4 15.9	APRIL 8.5 8.4 6.4 7.8 6.8 7.2 4.0 5.3 5.3 7.1 5.8 6.6 5.7	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.6 8.8 8.6 7.1 6.8 8.0 10.8 8.6	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 8.7 8.5 7.1 6.7	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.7 4.7 5.3 4.9 4.6	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2 6.4 6.2 6.7 5.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3 11.7 11.3	MARCH 13.1 12.5 12.2 11.9 11.9 12.1 11.7 11.3 11.2 9.8 10.2 10.1 7.8 7.9 10.8 9.9 10.0 9.8 9.6 8.8	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0 10.8 11.4 11.9 10.0 9.7 11.3 10.6 11.9 11.3	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2 15.0 10.3 9.3 7.4 10.4 15.9 12.9	APRIL 8.5 8.4 6.4 7.6 6.8 7.2 4.0 5.3 5.3 7.1 5.8 5.7 6.6 6.7 5.1	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.8 7.6 8.8 8.6 7.1 6.8 8.0 10.8 8.6	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8 9.1 8.7 8.5 	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.0 4.7 4.7 5.3 4.9 4.6 7.1	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2 6.4 6.2 6.7 5.7 5.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3 11.7 11.3	MARCH 13.1 12.5 12.2 11.9 11.9 12.1 11.7 11.7 11.3 11.2 9.8 10.2 10.1 7.8 7.9 10.8 9.9 10.0 9.8 8.8 9.6	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0 10.8 11.4 11.9 10.0 9.7 11.3 10.6 11.0 10.9 11.3	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2 15.0 10.3 9.3 7.4 10.4 15.9 12.9	APRIL 8.5 8.4 6.4 7.8 7.6 6.8 7.2 4.0 5.3 7.1 5.8 5.7 6.8 6.6 5.7	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.8 7.6 8.8 8.6 7.1 6.8 8.0 10.8 8.6 8.1 7.7	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8 9.1 8.7 8.5 7.1 6.7 7.4	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.0 4.7 4.7 5.3 4.9 4.6 7.1 5.3	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2 6.4 6.2 6.7 5.7 5.7 7.6 6.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3 11.7 11.3	MARCH 13.1 12.5 12.2 11.9 11.9 12.1 11.7 11.3 11.2 9.8 10.2 10.1 7.8 7.9 10.8 9.9 10.0 9.8 9.6 8.8	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0 10.8 11.4 11.9 10.0 9.7 11.3 10.6 11.9 11.3	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2 15.0 10.3 9.3 7.4 10.4 15.9 12.9	APRIL 8.5 8.4 6.4 7.6 6.8 7.2 4.0 5.3 5.3 7.1 5.8 5.7 6.6 6.7 5.1	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.8 7.6 8.8 8.6 7.1 6.8 8.0 10.8 8.6	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8 9.1 8.7 8.5 	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.0 4.7 4.7 5.3 4.9 4.6 7.1	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2 6.4 6.2 6.7 5.7 5.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3 11.7 11.3 11.6 11.0 12.2 12.4 13.1	MARCH 13.1 12.5 12.2 11.9 11.9 12.1 11.7 11.7 11.3 11.2 9.8 10.2 10.1 7.8 7.9 10.8 9.9 10.0 9.8 9.6 8.8 8.5 8.8	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0 10.8 11.4 11.9 10.0 9.7 11.3 10.6 11.0 10.9 11.3	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2 15.0 10.3 9.3 7.4 10.4 15.9 12.9	APRIL 8.5 8.4 6.4 7.8 7.6 6.8 7.2 4.0 5.3 5.3 7.1 5.8 6.6 5.7 6.8 6.6 5.7	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.6 8.8 8.6 7.1 6.8 8.0 10.8 8.6 8.1 7.7	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 8.7 8.5 7.1 6.7 7.4	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.7 4.7 5.3 4.9 4.6 7.1 5.3 5.0	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2 6.4 6.2 6.7 5.7 5.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3 11.7 11.3 11.6 11.0 12.2 12.4 13.1 13.1	MARCH 13.1 12.5 12.2 11.9 11.9 12.1 11.7 11.7 11.3 11.2 9.8 10.2 10.1 7.8 8 9.9 10.0 9.8 9.6 8.8 8.5 8.8 11.5 12.3	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.2 12.3 12.0 10.8 11.4 11.9 10.0 9.7 11.3 10.6 11.0 10.9 11.3 11.2 11.2 11.9	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2 15.0 10.3 9.3 7.4 10.4 15.9 12.9 13.2 10.2 13.8 13.4	APRIL 8.5 8.4 6.4 7.8 7.6 6.8 7.2 4.0 5.3 5.3 7.1 5.8 6.6 5.7 6.8 6.6 6.7	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.6 8.8 8.6 7.1 6.8 8.0 10.8 8.1 7.7 8.0 8.2	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 8.7 8.5 7.1 6.7 7.4	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.7 4.7 5.3 4.9 4.6 7.1 5.3 5.0 4.1 5.0	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2 6.4 6.2 6.7 5.7 5.4 7.6 6.2 5.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3 11.7 11.3 11.6 11.0 12.2 12.4 13.1	MARCH 13.1 12.5 12.2 11.9 11.9 12.1 11.7 11.3 11.2 9.8 10.2 10.1 7.8 7.9 10.8 9.9 10.0 9.8 9.6 8.8 8.5 8.5 8.5 8.1.5	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0 10.8 11.4 11.9 10.0 9.7 11.3 10.6 11.9 11.3	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2 15.0 10.3 9.3 7.4 10.4 15.9 12.9	APRIL 8.5 8.4 6.4 7.6 6.8 7.2 4.0 5.3 7.1 5.8 5.7 6.6 6.7 5.1 4.9 6.1 6.6	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.6 8.8 8.6 7.1 6.8 8.6 8.6 8.1 7.7 8.0 8.2	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8 9.1 8.7 8.5 7.1 6.7 7.4	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.0 4.7 4.7 5.3 4.9 4.6 7.1 5.3 5.0 4.1	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2 6.4 6.2 6.7 5.7 5.4 7.6 6.2 5.7 5.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3 11.7 11.3 11.6 11.0 12.2 12.4 13.1 13.1 13.1 11.6 11.0 12.5 13.1 13.1 13.1 13.3 11.6 11.0 11.0 11.0 11.0 11.0 11.0 11.0	MARCH 13.1 12.5 12.2 11.9 11.9 12.1 11.7 11.7 11.3 11.2 9.8 10.2 10.1 7.8 9.9 10.0 9.8 9.6 8.8 9.9 10.0 9.8 11.5 12.3	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0 10.8 11.4 11.9 10.0 9.7 11.3 10.6 11.0 11.9 11.3 11.2 11.0 11.9 12.8 13.6	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2 15.0 10.3 9.3 7.4 10.4 15.9 12.9 13.2 10.2 13.8 13.4	APRIL 8.5 8.4 6.4 7.8 7.6 6.8 7.2 4.0 5.3 7.1 5.8 5.7 6.8 6.6 5.7 5.1 4.9 6.1 6.6 4.8 4.2	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.6 8.8 8.6 7.1 6.8 8.0 10.8 8.6 8.1 7.7 8.0 8.2 	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 8.7 8.5 7.1 6.7 7.4 8.0 7.2 6.2 6.2 6.9 5.4	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.7 4.7 5.3 4.9 4.6 7.1 5.3 5.0 4.1 5.0 5.3 3.9 2.6	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2 6.4 6.2 6.7 5.7 5.4 7.6 6.2 5.7 5.5 6.2 6.1 4.9 4.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3 11.7 11.3 11.6 11.0 12.2 12.4 13.1 13.1 13.1 13.1 13.1 14.3 14.5 15.5 15.5 15.1	MARCH 13.1 12.5 11.9 11.9 12.1 11.7 11.3 11.2 9.8 10.2 10.1 7.8 7.9 10.8 9.9 10.0 9.8 9.6 8.8 8.5 8.1.5 12.3 11.0 10.1 10.1 10.7	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0 10.8 11.4 11.9 10.0 9.7 11.3 10.6 11.9 11.3 11.2 11.0 11.3 11.2 11.0	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2 15.0 10.3 9.3 7.4 10.4 15.9 12.9 13.2 10.2 13.3 13.4	APRIL 8.5 8.4 6.4 7.6 6.8 7.2 4.0 5.3 7.1 5.8 5.7 6.6 6.6 5.7 5.1 4.9 6.1 6.6 4.8 4.2 4.0	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.6 8.8 8.6 7.1 6.8 8.0 10.8 8.6 8.1 7.7 8.0 8.2 	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8 9.1 8.7 8.5 7.1 6.7 7.4 8.0 7.2 6.2 6.2 7.2	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.0 4.7 4.7 5.3 4.9 4.6 7.1 5.3 5.0 4.1 5.0 5.3 3.9 2.6 2.5	10.4 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2 6.4 6.2 6.7 5.7 5.4 7.6 6.2 5.7 5.5 6.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 11.7 11.3 11.6 11.0 12.2 12.4 13.1 13.8 13.7 14.3 15.5 15.5 15.1	MARCH 13.1 12.5 12.2 11.9 11.9 12.1 11.7 11.3 11.2 9.8 10.2 10.1 7.8 7.9 10.8 9.9 10.8 9.6 8.8 8.5 8.8 11.5 12.3 11.0 10.1 10.4 10.7 8.4	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0 10.8 11.4 11.9 10.0 9.7 11.3 10.6 11.0 11.9 11.3 11.2 11.0 11.9 11.3	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2 15.0 10.3 9.3 7.4 10.4 15.9 12.9 13.2 10.2 13.3 12.7 13.3 12.8	APRIL 8.5 8.4 6.4 7.8 7.6 6.8 7.2 4.0 5.3 7.1 5.8 5.7 6.6 6.6 5.7 5.1 4.9 6.1 6.6 4.8 4.2 4.0 4.1	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.8 7.6 8.8 8.6 7.1 6.8 8.0 10.8 8.6 8.1 7.7 8.0 8.2 	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8 9.1 8.7 8.5 7.1 6.7 7.4 8.0 7.2 6.2 7.2 6.9 5.4 6.9 5.4 6.9	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.0 4.7 4.7 5.3 4.6 7.1 5.3 5.0 4.1 5.0 5.3 3.9 2.6 2.5 3.6	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2 6.4 6.2 6.7 5.7 5.4 7.6 6.2 5.7 5.5 6.2 6.1 4.9 4.2 3.5 7.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29		FEBRUARY		13.5 13.1 13.4 12.9 13.1 13.3 12.8 12.9 13.1 13.0 11.4 12.8 14.3 11.7 11.3 11.6 11.0 12.2 12.4 13.1 13.1 13.1 13.1 13.1 14.3 14.5 15.5 15.5 15.1	MARCH 13.1 12.5 11.9 11.9 12.1 11.7 11.3 11.2 9.8 10.2 10.1 7.8 7.9 10.8 9.9 10.0 9.8 9.6 8.8 8.5 8.1.5 12.3 11.0 10.1 10.1 10.7	13.4 12.9 13.0 12.6 12.6 12.2 12.2 12.3 12.0 10.8 11.4 11.9 10.0 9.7 11.3 10.6 11.9 11.3 11.2 11.0 11.3 11.2 11.0	16.1 16.5 14.6 15.8 14.7 8.9 9.3 12.7 14.2 15.0 10.3 9.3 7.4 10.4 15.9 12.9 13.2 10.2 13.3 13.4	APRIL 8.5 8.4 6.4 7.6 6.8 7.2 4.0 5.3 7.1 5.8 5.7 6.6 6.6 5.7 5.1 4.9 6.1 6.6 4.8 4.2 4.0	10.2 11.8 e12.9 9.6 11.4 10.2 7.9 8.3 7.6 8.8 8.6 7.1 6.8 8.0 10.8 8.6 8.1 7.7 8.0 8.2 	15.9 11.2 11.5 7.7 7.3 7.5 8.5 8.1 6.8 9.1 8.7 8.5 7.1 6.7 7.4 8.0 7.2 6.2 6.2 7.2	MAY 4.3 2.9 4.4 4.4 3.9 4.3 6.6 5.2 4.0 4.0 4.7 4.7 5.3 4.9 4.6 7.1 5.3 5.0 4.1 5.0 5.3 3.9 2.6 2.5	10.4 7.8 7.2 6.6 5.4 5.8 7.4 6.5 5.3 6.2 6.4 6.2 6.7 5.7 5.4 7.6 6.2 5.5 6.2

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06892440 CEDAR CREEK AT HIGHWAY 56 AT OLATHE, KS--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBI	ER
1 2 3 4 5	10.0 9.7 10.4 11.1 10.4	7.7 8.0 8.2 9.9 9.7	8.4 9.0 9.3 10.6 10.1	5.7 6.7 8.0 7.7 7.8	4.3 4.8 4.7 5.4 4.4	5.2 5.3 6.0 6.3 5.6	12.8 13.3 	4.2 5.3 	7.3 7.6 e7.2 e8.7 e7.6	10.8 14.8 15.5 12.5	6.8 7.0 4.8 4.9	8.1 9.8 9.0 7.9 8.4
6 7 8 9 10	10.8 9.0 9.2 9.3 9.1	8.7 8.3 8.5 8.1 7.8	9.9 8.8 8.9 8.9 8.5	8.7 11.9 12.8 10.8 9.0	4.4 6.1 6.5 6.8 5.0	6.0 8.7 9.5 8.9 6.7	 7.3	 4.0	e7.9 e8.3 e8.9 e7.4 5.1	10.0 14.6 10.6 9.6 10.4	5.8 6.1 8.0 8.2 9.2	7.9 9.1 9.0 8.9 9.9
11 12 13 14 15	8.0 	7.1 	7.6 e7.2 e7.0 e6.7 e8.1	7.0 7.4 9.7 9.5 10.4	4.5 5.4 5.7 6.0 5.6	6.1 6.3 7.0 7.3	6.9 6.6 7.6 8.7 7.5	2.8 3.1 2.6 2.8 2.9	4.6 4.8 4.9 5.6 4.9	10.8 8.8 9.1 10.5 9.8	8.8 6.1 6.1 7.2 8.3	10.1 7.4 7.6 9.0 9.1
16 17 18 19 20	 7.8	 4.2	e7.7 e7.4 e7.1 e5.9 6.4	12.7 13.1 12.3 10.5 10.8	5.7 5.4 5.3 3.8 5.3	8.0 8.1 7.9 7.3 7.9	9.0 6.8 12.8 10.8 12.9	2.0 1.9 2.9 4.3 4.2	4.7 4.0 6.7 7.0 8.3	11.2 12.0 11.9 11.8 11.2	8.2 8.7 9.7 10.5 9.7	9.3 10.9 11.0 11.3 10.5
21 22 23 24 25	7.7 	3.9	6.1 	10.9 11.0 11.1 9.4 8.1	5.3 5.2 5.0 4.2 4.2	7.9 8.2 7.8 7.1 5.9	8.7 7.6 8.1 10.8 8.9	2.7 3.9 4.8 6.0	6.0 5.9 6.7 7.6 7.9	10.5 12.2 11.5 11.9 9.5	8.7 8.3 9.4 9.3 8.5	9.5 10.0 10.3 10.0 9.1
26 27 28 29 30 31	5.8 5.7 9.5 7.7	4.0 3.9 4.1 5.5	e4.9 4.8 4.6 5.9 6.5	6.3 6.1 8.0 9.2 9.9	3.1 3.3 4.0 5.9 5.2 4.5	4.6 4.8 6.8 6.9 6.5 6.6	7.9 10.7 10.9 9.3 9.8 9.1	5.2 5.4 5.7 4.1 6.5 7.4	6.3 6.7 7.5 6.8 7.9 8.5	9.8 9.0 8.6 11.1 12.3	8.9 7.9 7.7 8.1 9.8	9.4 8.5 8.2 9.0 10.9
MONTH YEAR	11.1 16.5	3.9 1.9	7.6 8.3	13.1	3.1	6.9	13.3	1.9	6.8	15.5	4.8	9.3

e Estimated

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 20 DAY MAX MIN MEAN MAX MIN MEAN MAX MIN MEAN MAX MIN MEAN OCTOBER NOVEMBER DECEMBER JANUARY 10 170 14 <2.0 ---------2 97 11 28 110 34 ------------4.8 9.1 3.1 3 4 41 19 17 ------23 <2.0 ------------------5 820 19 140 260 <2.0 15 ------140 32 46 >1300 24 >290 ---140 20 12 34 32 67 83 46 53 47 ---------------8 ---190 32 ---9 180 10 42 26 47 ------------------------------10 190 8.0 28 44 26 32 7.2 51 29 22 25 ---------11 210 6.7 26 17 12 95 29 17 22 15 ---------12 7.1 13 e20 70 5.0 ---14 16 21 12 ---------9.0 15 62 5.1 23 12 4.3 ---------------2.1 <2.0 <2.0 16 5.1 <2.0 18 11 8.2 ___ ___ <2.0 <2.0 9.2 10 8.0 ------------17 <2.0 12 9.7 ------<2.0 18 6.6 19 <2.0 <2.0 <2.0 6.7 4.4 5.5 3.7 ___ ___ ___ ---___ ---20 ------------------<2.0 <2.0 <2.0 4.4 3.2 21 <2.0 <2.0 <2.0 3.4 2 2 2.8 ---------___ ___ ---22 23 24 <2.0 ------------<2.0 <2.0 57 <2.0 ------2.5 2.1 140 <2.0 <2.0 <2.0 22 15 32 13 < 2.0 < 2.0 < 2.0 ___ ------___ ___ ___ 25 ------------------28 9.6 <2.0 <2.0 <2.0 7.3 26 27 42 20 <2.0 <2.0 <2.0 5.4 ---------------20 <2.0 <2.0 <2.0 ---28 29 <2.0 12 ------4.6 8.0 ___ ---___ ___ 12 <2.0 <2.0 <2.0 30 <2.0 ---<2.0 ---------------8.1 ---290 <2.0 2.0 MONTH 820 25 1300 2.0 24 ------------

06892440 CEDAR CREEK AT HIGHWAY 56 AT OLATHE, KS--Continued

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 20

1010121	TY, FIEL	D, WATER	, UNFILL	TERED, NEPH	HELOMETR	IC TURBIC	OITY UNITS,	WATER	YEAR OCTO	DBER 2000	TO SEPTE	MBER 20
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1				320	96	160	17	2.4	7.0	20	10	14
2				>330 260	170 96	>220 150	22 280	<2.0 9.4	11 65	19 >1300	8.0 6.0	14 >170
4				98	75	85	64	29	44	520	120	250
5				120	67	80	29	12	17	200	91	130
6 7				120 68	54 45	65 52	27 34	9.7 17	17 28	160 140	92 70	120 110
8				63	43	48	25	12	17	110	74	90
9 10				68 54	43 35	54 41	22 490	9.1 7.1	16 86	100 120	63 65	80 81
11 12				72 53	42 34	57 46	190 70	50 26	>110 55	180 110	73 74	120 89
13 14				44 65	25 33	32 45	63 >1300	24 29	44 110	97 110	60 52	76 68
15				>330	47	>220	950	83	280	65	45	54
16				>330	140	>190	110	56	76	58	28	42
17				140 83	82 63	120 70	57 35	29	43 30	>1300	19	>390
18 19				63	47	55	39	26 25	31	>1300 260	28 94	>260 140
20				52	40	46	54	22	34	720	81	160
21				48	30	e44	50	18	34	320	87	140
22 23				69 57	28 24	41 39	53 54	24 8.6	34 26	120 78	43 28	84 52
24 25				28 19	16 5.4	21 9.4	21 22	4.6 4.7	9.4 12	62 58	42 28	55 45
26 27	>330 260	140	180	110 37	<2.0 8.5	24 17	32 32	4.7 16	15 23	62 65	36 28	45 45
28	300	120	160	30	2.7	16	32	14	20	73	37	50
29 30				16 6.0	4.9 3.0	8.3 4.6	24 22	12 10	18 15	61 940	31 26	48 160
31				12	2.2	6.3				290	140	170
MONTH	330	120	170	330	2.0	67	1300	2.0	44	1300	6.0	110
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN		MIN AUGUST	MEAN	MAX	MIN SEPTEMB	
		JUNE			JULY			AUGUST			SEPTEMB	ER
1 2	>1300 1200	JUNE 73 210	>400 450	47 32	JULY 27 12	34 24	65 49	AUGUST 10 10	31 28	81 43	SEPTEMB 39 18	ER 58 30
1	>1300	JUNE 73 : 210 180 :	>400	47	JULY 27	34	65	AUGUST	31	81	SEPTEMB	ER 58
1 2 3	>1300 1200 >1300	JUNE 73 : 210 180 :	>400 450 >430	47 32 39	JULY 27 12 14	34 24 22	65 49 590	10 10 10 7.6	31 28 84	81 43 37	SEPTEMB 39 18 12	ER 58 30 22
1 2 3 4 5	>1300 1200 >1300 >1300 >1300 340 >1300	JUNE 73 : 210 180 : 230 : 200 170 :	>400 450 >430 >690 280 >540	47 32 39 25 20	JULY 27 12 14 7.0 5.0 2.0	34 24 22 15 9.3	65 49 590 120 97	10 10 7.6 37 24	31 28 84 70 55	81 43 37 84 30	SEPTEMB 39 18 12 7.0 7.1	58 30 22 21 14
1 2 3 4 5	>1300 1200 >1300 >1300 >1300 340	JUNE 73 : 210 180 : 230 :	>400 450 >430 >690 280 >540 150	47 32 39 25 20	JULY 27 12 14 7.0 5.0 2.0 4.0	34 24 22 15 9.3 5.7 7.0	65 49 590 120 97 120	10 10 7.6 37 24	31 28 84 70 55	81 43 37 84 30	39 18 12 7.0 7.1	58 30 22 21 14
1 2 3 4 5 6 7 8 9	>1300 1200 >1300 >1300 >1300 340 >1300 210 190 170	JUNE 73 : 210 180 : 230 : 200 170 : 120 92 64	>400 450 >430 >690 280 >540 150 130 110	47 32 39 25 20 12 12 16 36	JULY 27 12 14 7.0 5.0 2.0 4.0 4.0 3.0	34 24 22 15 9.3 5.7 7.0 7.5	65 49 590 120 97 120 95 130 68	10 10 7.6 37 24 26 18 23 22	31 28 84 70 55 47 45 45	81 43 37 84 30 46 440 240 150	39 18 12 7.0 7.1 13 16 42 72	58 30 22 21 14 29 51 76 90
1 2 3 4 5 6 7 8 9	>1300 1200 >1300 >1300 >1300 340 >1300 210 190 170 100	JUNE 73 :: 210 :: 180 :: 230 :: 270 :: 170 :: 120 :: 92 :: 64 :: 50 ::	>400 450 >430 >690 280 >540 150 130 110 64	47 32 39 25 20 12 12 16 36 >1300	JULY 27 12 14 7.0 5.0 2.0 4.0 4.0 3.0 16	34 24 22 15 9.3 5.7 7.0 7.5 10 >260	65 49 590 120 97 120 95 130 68 84	10 10 7.6 37 24 26 18 23 22 37	31 28 84 70 55 47 45 45 45 66	81 43 37 84 30 46 440 240 150 190	39 18 12 7.0 7.1 13 16 42 72 94	58 30 22 21 14 29 51 76 90 130
1 2 3 4 5 6 7 8 9	>1300 1200 >1300 >1300 >1300 340 >1300 210 190 170	JUNE 73 : 210 180 : 230 : 200 170 : 120 92 64	>400 450 >430 >690 280 >540 150 130 110	47 32 39 25 20 12 12 16 36	JULY 27 12 14 7.0 5.0 2.0 4.0 4.0 3.0	34 24 22 15 9.3 5.7 7.0 7.5 10 >260	65 49 590 120 97 120 95 130 68	10 10 7.6 37 24 26 18 23 22	31 28 84 70 55 47 45 45	81 43 37 84 30 46 440 240 150	39 18 12 7.0 7.1 13 16 42 72	58 30 22 21 14 29 51 76 90
1 2 3 4 5 6 7 8 9 10 11 12 13	>1300 1200 >1300 >1300 >1300 340 >1300 210 190 170 100 100 72 88	JUNE 73 210 180 230 200 170 120 92 64 50 50 40 48	>400 450 >430 >6690 280 >540 150 130 64 70 57 67	47 32 39 25 20 12 12 16 36 >1300 >1300 330	JULY 27 12 14 7.0 5.0 2.0 4.0 4.0 3.0 16 64	34 24 22 15 9.3 5.7 7.0 7.5 10 >260 >360 e300 e200	65 49 590 120 97 120 95 130 68 84 74 64 64	10 10 7.6 37 24 26 18 23 22 37 19 20 21	31 28 84 70 55 47 45 45 45 45 47 37 43	81 43 37 84 30 46 440 240 150 190 190 120 90	39 18 12 7.0 7.1 13 16 42 72 94 54 33 24	58 30 22 21 14 29 51 76 90 130 110 74 52
1 2 3 4 5 6 7 8 9 10	>1300 1200 >1300 >1300 340 >1300 210 190 170 100 100 72	JUNE 73 210 180 230 200 170 120 92 64 50 50 40	>400 450 430 >690 280 >540 1150 130 110 64	47 32 39 25 20 12 12 16 36 >1300 >1300	JULY 27 12 14 7.0 5.0 2.0 4.0 3.0 16 64	34 24 22 15 9.3 5.7 7.0 7.5 10 >260 >360 e300	65 49 590 120 97 120 95 130 68 84	10 10 7.6 37 24 26 18 23 22 37	31 28 84 70 55 47 45 45 45 66	81 43 37 84 30 46 440 240 150 190	39 18 12 7.0 7.1 13 16 42 72 94	58 30 22 21 14 29 51 76 90 130
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	>1300 1200 >1300 >1300 >1300 210 190 170 100 100 72 88 120 100	JUNE 73 210 180 230 200 170 120 92 64 50 50 40 48 48 58	>400 450 >430 >6690 280 >540 150 130 64 70 67 77 77	47 32 39 25 20 12 12 16 36 >1300 >1300 330	JULY 27 12 14 7.0 5.0 2.0 4.0 4.0 3.0 16 64	34 24 22 15 9.3 5.7 7.0 7.5 10 >260 >360 e300 e200 e100 e60	65 49 590 120 97 120 95 130 68 84 74 64 64 66 89	10 10 7.6 37 24 26 18 23 22 37 19 20 21 28 32	31 28 84 70 55 47 45 45 45 66 47 37 43 51 50	81 43 37 84 30 46 440 240 150 190 190 120 90 49 36	39 18 12 7.0 7.1 13 16 42 72 94 54 33 24 18 17	58 30 22 21 14 29 51 76 90 130 110 74 52 32 26
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	>1300 1200 >1300 >1300 >1300 340 >1300 210 190 170 100 100 72 88 120 100 92 98	JUNE 73 210 180 230 200 170 120 92 64 50 50 40 48 48 58 39 31	>400 450 >430 >690 280 >540 150 130 110 64 70 57 67 77 72 54 48	47 32 39 25 20 12 12 16 36 >1300 >1300 330 57	JULY 27 12 14 7.0 5.0 2.0 4.0 4.0 3.0 16 64 24	34 24 22 15 9.3 5.7 7.0 7.5 10 >260 >360 e300 e100 e100 e60 34 e20	65 49 590 120 97 120 95 130 68 84 74 64 66 89	AUGUST 10 10 7.6 37 24 26 18 23 22 37 19 20 21 28 32 28 16	31 28 84 70 55 47 45 45 45 66 47 37 43 51 50	81 43 37 84 30 46 440 240 150 190 190 120 90 49 36	SEPTEMB 39 18 12 7.0 7.1 13 16 42 72 94 54 33 24 18 17 5.3	58 30 22 21 14 29 51 76 90 130 110 74 52 32 26 22 > 430
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	>1300 1200 >1300 >1300 >1300 340 >1300 210 190 170 100 72 88 120 100 92 98 55 160	JUNE 73 210 180 230 200 170 120 92 64 50 50 40 48 48 58 39 31 24 36	>400 450 >430 >690 280 >540 150 64 70 57 77 72 54 48 40 65	47 32 39 25 20 12 12 16 36 >1300 >1300 330 57 91	JULY 27 12 14 7.0 5.0 2.0 4.0 3.0 16 64 24	34 24 22 15 9.3 5.7 7.0 >260 >360 e300 e200 e100 e60 34 e20 e12 e7.0	65 49 590 120 97 120 95 130 68 84 74 64 66 89 75 53 58	AUGUST 10 10 7.6 37 24 26 18 23 22 37 19 20 21 28 32 28 16 19 13	31 28 84 70 55 47 45 45 45 66 47 37 43 51 50 46 35 41 36	81 43 37 84 30 46 440 240 150 190 190 120 90 49 36 38 >1300 >140	SEPTEMB 39 18 12 7.0 7.1 13 16 42 72 94 54 33 24 18 17 5.3 24 100 73	58 30 22 21 14 29 51 76 90 130 110 74 52 32 26
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	>1300 1200 >1300 >1300 >1300 340 >1300 210 190 170 100 72 88 120 100 92 98 55	JUNE 73 210 180 230 200 170 120 92 64 50 50 40 48 48 48 58 39 31 24	>400 450 >430 >6690 280 >540 150 110 64 70 57 67 77 72 54 48 40	47 32 39 25 20 12 12 16 36 >1300 >1300 330 91	JULY 27 12 14 7.0 5.0 2.0 4.0 4.0 3.0 16 64 24	34 24 22 15 9.3 5.7 7.0 7.5 10 >260 >360 e300 e200 e100 e60	65 49 590 120 97 120 95 130 68 84 74 64 66 89	AUGUST 10 10 7.6 37 24 26 18 23 22 37 19 20 21 28 32 28 16 19	31 28 84 70 55 47 45 45 45 45 45 45 45 45 45 45 45 45 45	81 43 37 84 30 46 440 240 150 190 190 120 90 49 36 38 >1300 >1300	SEPTEMB 39 18 12 7.0 7.1 13 16 42 72 94 54 33 24 18 17 5.3 24	58 30 22 21 14 29 51 76 60 130 110 74 52 32 26 >430 >>410
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	>1300 1200 >1300 >1300 >1300 340 >1300 210 190 170 100 72 88 120 100 92 98 55 160 770 420	JUNE 73 210 180 230 200 170 120 92 64 50 50 40 48 48 58 39 31 24 36 43 120	>400 450 450 >690 280 >540 150 64 70 67 77 72 54 48 40 65 300	47 32 39 25 20 12 12 16 36 >1300 >1300 330 57 91 11 12	JULY 27 12 14 7.0 5.0 2.0 4.0 3.0 16 64 24 <2.0 <2.0	34 24 22 15 9.3 5.7 7.0 7.5 10 >260 >360 e300 e200 e100 e60 34 e20 e100 e4.7 3.5	65 49 590 120 97 120 95 130 68 84 74 64 66 89 75 53 58 54 75	AUGUST 10 10 7.6 37 24 26 18 23 22 37 19 20 21 28 32 28 16 19 13 30 23	31 28 84 70 55 47 45 45 45 45 66 47 37 43 51 50 46 35 41 36 49	81 43 37 84 30 46 440 240 150 190 190 120 90 49 36 38 >1300 >140 83	SEPTEMB 39 18 12 7.0 7.1 13 16 42 72 94 54 33 24 18 17 5.3 24 100 73 40	58 30 22 21 14 29 51 76 90 130 110 74 52 32 26 22 >430 >410 158 46
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	>1300 1200 >1300 >1300 340 >1300 210 190 170 100 100 72 88 120 100 92 98 55 160 770	JUNE 73 210 180 230 200 170 120 92 64 50 50 40 48 58 39 31 24 36 43 120 78	>400 450 >430 >6690 280 >540 150 110 64 70 57 67 77 72 54 48 40 65 300	47 32 39 25 20 12 12 16 36 >1300 >1300 330 57 91 11	JULY 27 12 14 7.0 5.0 2.0 4.0 4.0 3.0 16 64 24 <2.0	34 24 22 15 9.3 5.7 7.0 7.5 10 >260 >360 e300 e200 e100 e60 34 e20 e12 e7.0 4.7 3.5 <2.0 <2.0	65 49 590 120 97 120 95 130 68 84 74 64 66 89 75 53 58 54 75	AUGUST 10 10 7.6 37 24 26 18 23 22 27 19 20 21 28 32 28 16 19 13 30	31 28 84 70 55 47 45 45 45 45 66 47 37 43 51 50 46 35 41 36 49	81 43 37 84 30 46 440 240 150 190 190 120 90 49 36 38 >1300 >1300 140 83	39 18 12 7.0 7.1 13 16 42 72 94 54 33 24 18 17 5.3 40	58 30 22 21 14 29 51 76 90 130 110 74 52 32 26 22 >430 >410 100 58
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	>1300 1200 >1300 340 >1300 340 >1300 210 190 170 100 72 88 120 100 92 98 55 160 770 420 140 86 57	JUNE 73 210 180 230 200 170 120 92 64 50 50 40 48 48 58 39 31 24 36 43 120 78 54 38	>400 450 5430 >690 280 >540 150 64 70 67 77 72 54 48 40 65 300 190 110 70 70 74	47 32 39 25 20 12 12 16 36 >1300 >1300 330 57 11 12 9.3 7.4 8.5	JULY 27 12 14 7.0 5.0 2.0 4.0 3.0 16 64 24 <2.0 <2.0 <2.0 <2.0 <2.0 <2.0 <2.0	34 24 22 15 9.3 5.7 7.0 7.5 10 >260 >360 e300 e200 e100 e60 34 e20 e12 e7.0 4.7 3.5 <2.0 <2.0	65 49 590 120 97 120 95 130 68 84 74 64 66 89 75 53 58 54 75	AUGUST 10 10 7.6 37 24 26 18 22 37 19 20 21 28 32 28 16 19 13 30 23 20 50 24	31 28 84 70 55 47 45 45 45 45 45 45 45 45 41 37 43 51 50 46 35 41 36 49 44 42 42 100 43	81 43 37 84 30 46 440 240 150 190 190 120 90 49 36 38 >1300 >140 83 57 48 110 70	SEPTEMB 39 18 12 7.0 7.1 13 16 42 72 94 54 33 24 18 17 5.3 24 100 73 40 37 25 23 20	58 30 22 21 14 29 51 76 90 130 110 74 52 32 26 22 >430 >410 158 46 33 55 43
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	>1300 1200 >1300 >1300 340 >1300 210 190 170 100 100 72 88 120 100 92 98 55 160 770 420 140 86 57 39	JUNE 73 210 180 230 200 170 120 92 64 50 50 40 48 48 58 39 31 24 36 43 120 78 54 38 29	>400 450 >430 >690 280 >540 150 130 110 64 70 57 67 77 72 54 48 40 65 300 190 110 70 47 33	47 32 39 25 20 12 12 16 36 >1300 >1300 330 57 11 12 9.3 7.4 8.5 32	JULY 27 12 14 7.0 5.0 2.0 4.0 4.0 3.0 16 64 <24 <2.0 <2.0 <2.0 <2.0 <2.0 <2.0	34 24 24 22 15 9.3 5.7 7.0 7.5 10 >260 >360 e300 e200 e100 e60 34 e20 e12 e7.0 4.7 3.5 <2.0 <2.0 2.7 9.1	65 49 590 120 97 120 95 130 68 84 74 64 66 68 89 75 53 58 54 75	AUGUST 10 10 7.6 37 24 26 18 23 22 37 19 20 21 28 32 28 16 19 13 30 23 20 50 24 41	31 28 84 70 55 47 45 45 45 66 47 37 43 51 50 46 35 41 36 49 44 42 100 43 >200	81 43 37 84 30 46 440 240 150 190 190 120 90 49 36 38 >1300 >140 83 57 48 110 70 20	SEPTEMB 39 18 12 7.0 7.1 13 16 42 72 94 54 33 24 18 17 5.3 24 100 73 40 37 25 23 20 9.0	58 30 22 21 14 29 51 76 90 130 110 74 52 32 26 22 >430 > 100 58 46 33 35 55 43 14
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	>1300 1200 >1300 340 >1300 340 >1300 210 190 170 100 72 88 120 100 92 98 55 160 770 420 140 86 57	JUNE 73 210 180 230 200 170 120 92 64 50 50 40 48 48 58 39 31 24 36 43 120 78 54 38	>400 450 >430 >690 280 >540 150 130 110 64 70 57 67 77 72 54 48 40 65 300 190 110 70 47 33 34 10	47 32 39 25 20 12 12 16 36 >1300 >1300 330 57 11 12 9.3 7.4 8.5	JULY 27 12 14 7.0 5.0 2.0 4.0 3.0 16 64 24 <2.0 <2.0 <2.0 <2.0 <2.0 <2.0 <2.0	34 24 22 15 9.3 5.7 7.0 7.5 10 >260 >360 e300 e200 e100 e60 34 e20 e12 e7.0 4.7 3.5 <2.0 <2.0	65 49 590 120 97 120 95 130 68 84 74 64 66 89 75 53 58 54 75	AUGUST 10 10 7,6 37 24 26 18 22 37 19 20 21 28 32 28 16 19 13 30 23 20 50 24	31 28 84 70 55 47 45 45 45 45 45 45 45 45 41 37 43 51 50 46 35 41 36 49 44 42 42 100 43	81 43 37 84 30 46 440 240 150 190 190 120 90 49 36 38 >1300 >140 83 57 48 110 70	SEPTEMB 39 18 12 7.0 7.1 13 16 42 72 94 54 33 24 18 17 5.3 24 100 73 40 37 25 23 20	58 30 22 21 14 29 51 76 90 130 110 74 52 32 26 22 >430 >410 158 46 33 55 43
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	>1300 1200 >1300 >1300 340 >1300 210 190 170 100 100 72 88 120 100 92 98 55 160 770 420 140 86 57 39 99 16 13	JUNE 73 210 180 230 200 170 120 92 64 50 50 40 48 48 58 39 31 24 36 43 120 78 54 38 29 12 5.0 2.0	>400 450 >430 >690 280 >540 150 130 110 64 70 57 67 77 72 54 48 40 65 300 190 110 70 47 33 34 10 6.9	47 32 39 25 20 12 12 16 36 >1300 >1300 330 57 91 11 12 9.3 7.4 8.5 32 17 34 >1300	JULY 27 12 14 7.0 5.0 2.0 4.0 4.0 3.0 16 64 <24 <2.0 <2.0 <2.0 <2.0 <2.0 <2.0 18	34 24 22 15 9.3 5.7 7.0 7.5 10 >260 >360 e300 e200 e100 e60 34 e20 e12 e7.0 4.7 3.5 <2.0 <2.0 2.7 9.1	65 49 590 120 97 120 95 130 68 84 74 64 66 89 75 53 58 54 75 69 62 260 58 >1300	AUGUST 10 10 7,6 37 24 26 18 23 22 37 19 20 21 28 32 28 16 19 13 30 23 20 50 24 41 30 19 12	31 28 84 70 55 47 45 45 46 47 37 43 51 50 46 35 41 36 49 44 42 100 43 >200	81 43 37 84 30 46 440 240 150 190 190 120 90 49 36 38 >1300 >140 83 57 48 110 70 20 9.0 9.0 10 10 10 10 10 10 10 10 10 10 10 10 10	SEPTEMB 39 18 12 7.0 7.1 13 16 42 72 94 54 33 24 18 17 5.3 40 37 25 23 20 9.0 5.0 <2.0	58 30 22 21 14 29 51 76 90 130 110 74 52 32 26 22>430 >>410 100 58 46 33 55 43 14 7.1 3.4 4<2.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	>1300 1200 >1300 >1300 340 >1300 210 190 170 100 100 72 88 120 100 92 98 55 160 770 420 140 86 57 39 99 16 13 18 99 18	JUNE 73 210 180 230 200 170 120 92 64 50 40 48 48 58 39 31 24 36 43 120 78 54 38 29 12 5.0 2.0 43	>400 450 >690 280 >540 150 110 64 70 57 67 77 72 54 48 40 65 300 190 110 70 67 77 73 33 34 10 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9	47 32 39 25 20 12 12 16 36 >1300 >1300 330 57 11 12 9.3 7.4 8.5 32 17 34 >1300 120 96	JULY 27 12 14 7.0 5.0 2.0 4.0 3.0 16 64 <20 <2.0 <2.0 <2.0 <2.0 <2.0 <2.0 <2.0	34 24 22 15 9.3 5.7 7.0 7.5 10 >260 >360 e300 e200 e100 e60 34 e20 e12 e7.0 4.7 3.5 <2.0 <2.0 2.7 9.1 4.6 16 >350 70 58	65 49 590 120 97 120 95 130 68 84 74 64 64 66 89 75 53 58 75 69 62 260 58 >1300 95 58 >1300	AUGUST 10 10 7.6 37 24 26 18 23 22 37 19 20 21 28 32 28 16 19 13 30 23 20 50 24 41 30 19 12 6.4 58	31 28 84 70 55 47 45 45 45 46 35 41 36 49 44 42 100 43 >200 52 42 28 46 >310	81 43 37 84 30 46 440 240 150 190 190 120 90 49 36 38 >1300 >1300 140 83 57 48 110 70 20 9.0 6.0 10 10 10 10 10 10 10 10 10 10 10 10 10	SEPTEMB 39 18 12 7.0 7.1 13 16 42 72 94 54 33 24 18 17 5.3 24 100 73 40 37 25 23 20 9.0 <2.0 <2.0 <2.0 <2.0	58 30 22 21 14 29 51 76 90 130 110 74 52 32 26 2430 >410 100 58 43 34 <2.0 <2.0 <4.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	>1300 1200 >1300 >1300 340 >1300 210 190 170 100 100 72 88 120 100 92 98 55 160 770 420 140 86 57 39 99 16 13 180	JUNE 73 : 210 180 : 230 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 : 200 170 :	>400 450 5430 >690 280 >540 150 64 70 67 77 72 54 48 40 65 300 190 110 70 70 70 70 70 71 72 54 40 65 300 300 300 300 300 300 300 300 300 30	47 32 39 25 20 12 12 16 36 >1300 >1300 330 57 11 12 9.3 7.4 8.5 32 17 34 >1300 120 96 75	JULY 27 12 14 7.0 5.0 2.0 4.0 3.0 16 64 <2.0 <2.0 <2.0 <2.0 <2.0 <2.0 <2.0 <2.0	34 24 22 15 9.3 5.7 7.0 7.5 10 >260 >360 e300 e200 e100 e60 34 e20 e12 e7.0 4.7 3.5 <2.0 <2.7 9.1 4.6 16 >350 70 58 45	65 49 590 120 97 120 95 130 68 84 74 64 66 89 75 53 58 54 75 69 62 260 58 >1300	AUGUST 10 10 7,6 37 24 26 18 22 37 19 20 21 28 32 28 16 19 13 30 23 20 50 24 41 30 19 12 6.4 58 56	31 28 84 70 55 47 45 45 45 45 45 45 45 45 41 35 51 50 46 35 41 42 100 43 >200	81 43 37 84 30 46 440 240 150 190 120 90 49 36 38 >1300 >140 83 57 48 110 70 20 9.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6	SEPTEMB 39 18 12 7.0 7.1 13 16 42 72 94 54 33 24 18 17 5.3 24 100 73 40 37 25 23 20 9.0 5.0 <2.0 <2.0	58 30 22 21 14 29 51 76 90 130 110 74 52 32 26 2430 >> 410 100 58 46 33 55 54 43 14 7.1 3.4 << 2.0 << 2.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	>1300 1200 >1300 >1300 340 >1300 210 190 170 100 100 72 88 120 100 92 98 55 160 770 420 140 86 57 39 99 16 13 18 99 18	JUNE 73 210 180 230 200 170 120 92 64 50 40 48 48 58 39 31 24 36 43 120 78 54 38 29 12 5.0 2.0 43	>400 450 >690 280 >540 150 110 64 70 57 67 77 72 54 48 40 65 300 190 110 70 67 77 73 33 34 10 6.9 6.9 6.9 6.9 6.9 6.9 6.9 6.9	47 32 39 25 20 12 12 16 36 >1300 >1300 330 57 11 12 9.3 7.4 8.5 32 17 34 >1300 120 96	JULY 27 12 14 7.0 5.0 2.0 4.0 3.0 16 64 <2.0 <2.0 <2.0 <2.0 <2.0 <2.0 <2.0 <2.0	34 24 22 15 9.3 5.7 7.0 7.5 10 >260 >360 e300 e200 e100 e60 34 e20 e12 e7.0 4.7 3.5 <2.0 <2.0 2.7 9.1 4.6 16 >350 70 58	65 49 590 120 97 120 95 130 68 84 74 64 64 66 89 75 53 58 75 69 62 260 58 >1300 95 58 >1300	AUGUST 10 10 7.6 37 24 26 18 23 22 37 19 20 21 28 32 28 16 19 13 30 23 20 50 24 41 30 19 12 6.4 58	31 28 84 70 55 47 45 45 45 46 35 41 36 49 44 42 100 43 >200 52 42 28 46 >310	81 43 37 84 30 46 440 240 150 190 190 120 90 49 36 38 >1300 >1300 140 83 57 48 110 70 20 9.0 6.0 10 10 10 10 10 10 10 10 10 10 10 10 10	SEPTEMB 39 18 12 7.0 7.1 13 16 42 72 94 54 33 24 18 17 5.3 24 100 73 40 37 25 23 20 9.0 <2.0 <2.0 <2.0 <2.0	58 30 22 21 14 29 51 76 90 130 110 74 52 32 26 2430 >410 100 58 43 34 <2.0 <2.0 <4.7

e Estimated

< Actual value is known to be less than the value shown

06892450 OLATHE LAKE NEAR OLATHE, KS

LOCATION.--Lat $38^{\circ}52^{\circ}52^{\circ}$, long $94^{\circ}52^{\circ}23^{\circ}$, in SE $^{1}/_{4}$ NE $^{1}/_{4}$ NE $^{1}/_{4}$ sec.32, T.13 S., R.23 E., Johnson County, Hydrologic Unit 10300101, on control structure of Olathe Lake on Cedar Creek, 2 mi west of Olathe, and at mile 13.0.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--13.3 mi².

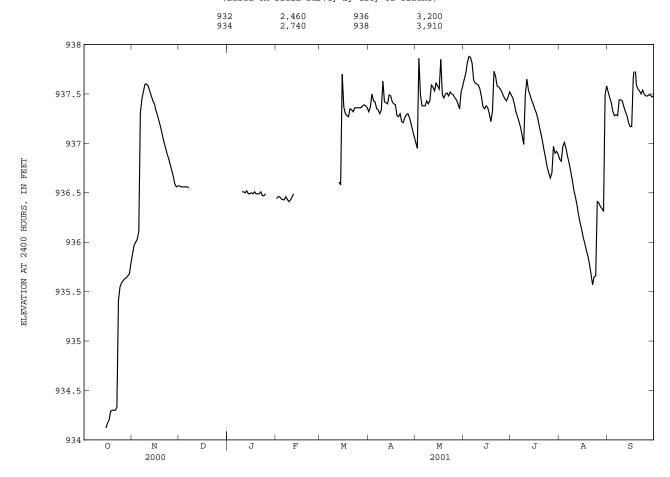
PERIOD OF RECORD. -- October 2000 to September 2001.

GAGE.--Water-stage recorder. Datum of gage is sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Reservoir is compacted earth fill dam and concrete control structure. Filling began January 1956. Reservoir is used for water supply. Satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 937.89 ft June 4, contents, 3,870 acre-ft; minimum elevation, 933.61 ft Oct. 14, contents, 2,680 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet) (Based on field survey by City of Olathe)



06892450 OLATHE LAKE NEAR OLATHE, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		935.88	936.57		936.44		937.32	937.01	937.65	937.49	936.84	937.52
2		935.97	936.56		936.46		937.37	936.95	937.71	937.46	936.82	937.46
3		936.00	936.56		936.46		937.50	937.86	937.82	937.40	936.97	937.41
4		936.03	936.56		936.44		937.43	937.49	937.88	937.32	937.01	937.32
5		936.11	936.56		936.43		937.42	937.38	937.87	937.27	936.95	937.28
6		937.31	936.56		936.43		937.35	937.38	937.81	937.22	936.87	937.29
7		937.45	936.55		936.46		937.34	937.38	937.64	937.16	936.80	937.28
8		937.53			936.43		937.30	937.43	937.61	937.08	936.72	937.44
9		937.60			936.41		937.34	937.40	937.60	936.99	936.63	937.44
10		937.60		936.51	936.43		937.63	937.43	937.59	937.49	936.53	937.43
11		937.58		936.51	936.46		937.42	937.59	937.55	937.65	936.46	937.37
12		937.53		936.50	936.49		937.41	937.57	937.47	937.54	936.38	937.32
13		937.48		936.52		936.61	937.40	937.53	937.37	937.49	936.28	937.28
14		937.43		936.49		936.58	937.49	937.61	937.35	937.44	936.20	937.21
15	934.12	937.40		936.49		937.70	937.48	937.58	937.38	937.40	936.13	937.17
16	934.17	937.33		936.50		937.37	937.42	937.55	937.36	937.35	936.05	937.17
17	934.20	937.28		936.49		937.30	937.40	937.85	937.30	937.31	935.99	937.66
18	934.29	937.22		936.51		937.28	937.39	937.49	937.22	937.25	935.92	937.82
19	934.30	937.16		936.49		937.27	937.28	937.46	937.32	937.17	935.86	937.59
20	934.30	937.09		936.49		937.35	937.27	937.50	937.73	937.10	935.78	937.55
21	934.30	937.02		936.49		937.34	937.30	937.51	937.68	937.02	935.68	937.53
22	934.33	936.96		936.51		937.32	937.22	937.48	937.58	936.93	935.57	937.50
23	935.41	936.90		936.47		937.36	937.21	937.52	937.57	936.85	935.65	937.54
24	935.55	936.85		936.47		937.36	937.26	937.50	937.55	936.76	935.66	937.50
25	935.59	936.79		936.49		937.36	937.29	937.49	937.52	936.70	936.41	937.48
26	935.61	936.73				937.36	937.30	937.46	937.48	936.65	936.40	937.48
27	935.63	936.67				937.36	937.26	937.44	937.45	936.70	936.36	937.49
28	935.64	936.59				937.38	937.20	937.40	937.43	936.97	936.34	937.49
29	935.66	936.56				937.39	937.13	937.35	937.47	936.90	936.31	937.47
30	935.68	936.57				937.38	937.07	937.52	937.52	936.92	937.49	937.48
31	935.79					937.36		937.58		936.89	937.58	
MEAN		936.95					937.34	937.47	937.55	937.16	936.41	937.43
MAX		937.60					937.63	937.86	937.88	937.65	937.58	937.82
MIN		935.88					937.07	936.95	937.22	936.65	935.57	937.17
(+)	3,140	3,390				3,670	3,570	3,750	3,730	3,500	3,750	3,720
(#)		+250					-100	+180	-20	-230	+250	-30

06892450 OLATHE LAKE NEAR OLATHE, KS--Continued

WATER-OUALITY RECORDS

PERIOD OF RECORD. -- October 2000 to September 2001.

PERIOD OF DAILY RECORD. --

SPECIFIC CONDUCTANCE: October 2000 to September 2001. pH: October 2000 to September 2001. water Temperature: October 2000 to September 2001. DISSOLVED OXYGEN: October 2000 to September 2001. TURBIDITY: October 2000 to September 2001.

INSTRUMENTATION. -- Multiparameter water-quality monitor.

REMARKS.--Records fair. Interruptions in record are due to ice condtions or malfunction of the recording instrument or sensors. Instruments used to measure trubidity conform to ISO 7027 standards.

EXTREMES FOR PERIOD OF RECORD .--

SPECIFIC CONDUCTANCE: Maximum, 691 microsiemens/cm, May 1, 2001; minimum, 361 microsiemens/cm, July 18, 2001. pH: Maximum, 9.0 standard units, July 8, 2001; minimum, 7.0 standard units, Oct. 18, 2000. WATER TEMPERATURE: Maximum, 33.7 °C, Aug. 5, 2001; minimum, 3.9 °C, Dec. 7, 2000. DISSOLVED OXYGEN: Maximum 14.3 mg/L, Sept. 28, 2001; minimum, 2.4 mg/L, July 10, 2001. TURBIDITY: Maximum, 210 NTU, June 4, 2001; minimum, <2.0 NTU, Oct. 29, 2000.

EXTREMES FOR CURRENT YEAR.-SPECIFIC CONDUCTANCE: Maximum, 691 microsiemens/cm, May 1; minimum, 361 microsiemens/cm, July 18.
pH: Maximum, 9.0 standard units, July 8; minimum, 7.0 standard units, Oct. 18.
WATER TEMPERATURE: Maximum, 33.7 °C, Aug. 5; minimum, 3.9 °C, Dec. 7.
DISSOLVED OXYGEN: Maximum, 14.3 mg/L, Sept. 28; minimum, 2.4 mg/L, July 10.
TURBIDITY: Maximum, 210 ntu, June 4; minimum, <2.0 ntu, Oct. 29.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN									
		OCTOBER		NO	OVEMBER		DI	ECEMBER			JANUARY	
1	528	516	523	523	512	519	543	541	542			
2	525	510	514	522	518	520	544	540	542			
3	536	515	526	526	514	521	544	542	543			
4	525	511	517	527	515	522	545	543	544			
5	527	507	518	528	517	520	546	543	544			
6	523	513	517	547	517	522	546	544	545			
7	530	510	521	530	507	515						
8	524	516	521	520	508	514						
9	532	518	525	521	519	520						
10	536	522	529	525	521	524						
11	529	518	524	525	521	522						
12	529	521	525	532	522	524						
13	525	517	520	534	524	527						
14	525	510	520	531	524	527						
15	522	517	519	530	528	529						
16	523	517	520	532	529	530						
17			e526	535	530	532						
18			e532	538	533	535						
19			e528	538	533	535						
20	528	522	524	536	534	535						
21	527	523	526	536	534	535						
22	529	524	526	539	535	538						
23	527	523	526	540	537	538						
24	528	514	521	544	538	540						
25	520	517	519	546	538	541						
26	524	517	519	544	538	541						
27	521	519	520	541	539	540						
28	521	519	520	541	539	540						
29	522	519	521	541	539	540						
30	524	518	522	543	540	541						
31	523	518	522									
MONTH	536	507	522	547	507	530	546	540	543			

06892450 OLATHE LAKE NEAR OLATHE, KS--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SF	ECIFIC	CONDUCTA	LIVED (FILE)	ODIDIDINO,	20	220. 077	WATER YEA		2000 1	O DEL LEGIDE	R 2001	
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
		r EBRUARI			MARCH			AFKIL			MAI	
1							670	667	668	691	686	687
2							671 668	665 664	668	688	687 684	688
4							671	666	666 667	689 687	679	687 684
5							680	670	674	680	674	677
_							670	C71	C7.C	670	C7.C	677
6 7							678 679	674 676	676 678	678 679	676 676	677 678
8							681	678	679	678	675	677
9							681	677	680	677	674	676
10							680	675	678	676	674	675
11							682	675	679	678	675	676
12							684	681	683	680	675	677
13				645	639	643	686	680 678	683	680	677 678	678
14 15				648 647	643 642	646 645	685 685	680	683 682	679 679	679	678 679
							003					
16				654	645	650	682	681	681	681	676	679
17 18				656 655	652 653	654 654	683 682	680 680	682 681	681 674	661 622	673 651
19				655	654	654	682	680	681	646	636	640
20				656	651	655	684	681	682	641	628	634
21				660	652	655	686	680	684	649	633	644
22				656	652	654	685	681	684	653	647	650
23				657	641	651	686	682	684	653	651	652
24				660	652	658	688	682	685	655	653	654
25				661	660	660	689	683	687	656	654	655
26				663	659	661	690	687	688	657	655	656
27				664	661	663	690	686	688	657	654	657
28 29				665 669	663 661	664 664	690 688	683 684	687 686	660 655	650 650	656 652
30				665	659	662	686	685	685	654	651	652
31				671	660	666				658	654	657
MONTH				671	639	656	690	664	680	691	622	666
11011111				071	033	050	050	001	000	051	022	000
D311	242.75	24727		343.15				14737		242.15	24727	
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN		MIN	MEAN		MIN EPTEMBE	
		JUNE			JULY		I	AUGUST		S	EPTEMBE	R
1	660	JUNE 655	659	443	JULY 410	433	398	AUGUST 386	392	400	EPTEMBE	R 398
		JUNE			JULY		I	AUGUST		S	EPTEMBE	R
1 2 3 4	660 660 643 628	JUNE 655 635 628 532	659 644 637 595	443 421 422 431	JULY 410 405 415 418	433 411 418 424	398 398 394 390	386 387 380 377	392 391 388 384	400 399 402 404	395 395 395 395 384	398 398 399 400
1 2 3	660 660 643	JUNE 655 635 628	659 644 637	443 421 422	JULY 410 405 415	433 411 418	398 398 394	386 387 380	392 391 388	400 399 402	395 395 395 395	398 398 399
1 2 3 4	660 660 643 628	JUNE 655 635 628 532	659 644 637 595	443 421 422 431	JULY 410 405 415 418	433 411 418 424	398 398 394 390	386 387 380 377	392 391 388 384	400 399 402 404	395 395 395 395 384	398 398 399 400
1 2 3 4 5	660 660 643 628 566 519 493	JUNE 655 635 628 532 464 440 422	659 644 637 595 536 493 456	443 421 422 431 430 426 425	JULY 410 405 415 418 421 420 420	433 411 418 424 425 422 423	398 398 394 390 396 409 409	386 387 380 377 380 375 382	392 391 388 384 387 389	400 399 402 404 389 394 401	395 395 395 395 384 384 389 394	398 398 399 400 387 391 398
1 2 3 4 5	660 660 643 628 566 519 493 477	JUNE 655 635 628 532 464 440 422 450	659 644 637 595 536 493 456 462	443 421 422 431 430 426 425 426	JULY 410 405 415 418 421 420 420 422	433 411 418 424 425 422 423 424	398 398 394 390 396 409 409 395	386 387 380 377 380 375 382 376	392 391 388 384 387 389 392 383	400 399 402 404 389 394 401 411	395 395 395 395 384 384 389 394 400	398 398 399 400 387 391 398 406
1 2 3 4 5 6 7 8 9	660 660 643 628 566 519 493 477 487	JUNE 655 635 628 532 464 440 422 450 447	659 644 637 595 536 493 456 462 460	443 421 422 431 430 426 425 426 428	JULY 410 405 415 418 421 420 420 422 422	433 411 418 424 425 422 423 424 425	398 398 394 390 396 409 409 395 415	386 387 380 377 380 375 382 376 376	392 391 388 384 387 389 392 383 386	400 399 402 404 389 394 401 411 414	395 395 395 395 384 384 384 400 409	398 398 399 400 387 391 398 406 412
1 2 3 4 5 6 7 8 9	660 660 643 628 566 519 493 477 487 485	JUNE 655 635 628 532 464 440 422 450 447 451	659 644 637 595 536 493 456 462 460 470	443 421 422 431 430 426 425 426 428 430	JULY 410 405 415 418 421 420 420 422 407	433 411 418 424 425 422 423 424 425 413	398 398 394 390 396 409 409 395 415	386 387 380 377 380 375 382 376 376 393	392 391 388 384 387 389 392 383 386 403	400 399 402 404 389 394 401 411 414 416	395 395 395 395 384 384 389 394 400 409 408	398 398 399 400 387 391 398 406 412 413
1 2 3 4 5 6 7 8 9 10	660 660 643 628 566 519 493 477 487 485	JUNE 655 635 628 532 464 440 422 450 447 451	659 644 637 595 536 493 456 462 460 470	443 421 422 431 430 426 425 426 428 430	JULY 410 405 415 418 421 420 420 422 422 407 404	433 411 418 424 425 422 423 424 425 413	398 398 394 390 396 409 409 395 415 415	386 387 380 377 380 375 382 376 376 393	392 391 388 384 387 389 392 383 386 403	400 399 402 404 389 394 401 411 414 416	395 395 395 395 384 384 389 394 400 409 408	398 398 399 400 387 391 398 406 412 413
1 2 3 4 5 6 7 8 9 10	660 660 643 628 566 519 493 477 487 485	JUNE 655 635 628 532 464 440 422 450 447 451 466 477	659 644 637 595 536 493 456 462 460 470	443 421 422 431 430 426 425 426 428 430	JULY 410 405 415 418 421 420 420 422 407 404 404	433 411 418 424 425 422 423 424 425 413 410 406	398 398 394 390 396 409 409 395 415 415	386 387 380 377 380 375 382 376 376 393 406 405	392 391 388 384 387 389 392 383 386 403	400 399 402 404 389 394 401 411 414 416	395 395 395 395 384 384 389 394 400 409 408 408	398 398 399 400 387 391 398 406 412 413
1 2 3 4 5 6 7 8 9 10 11 12 13 14	660 660 643 628 566 519 493 477 485 492 491 484 480	JUNE 655 635 628 532 464 440 422 450 447 451	659 644 637 595 536 493 456 462 460 470 482 481 482 477	443 421 422 431 430 426 425 426 428 430 422 409 410 410	JULY 410 405 415 418 421 420 422 407 404 404 404 401	433 411 418 424 425 423 424 425 413 410 406 408 405	398 398 394 390 396 409 409 395 415 415 411 408 403	386 387 380 377 380 375 382 376 376 393 406 405 400 400	392 391 388 384 387 389 392 383 386 403 408 408 404 401	400 399 402 404 389 394 401 411 414 416	395 395 395 395 384 384 389 400 409 408 411 413 409	398 398 399 400 387 391 398 406 412 413 411 413 414 411
1 2 3 4 5 6 7 8 9 10	660 660 643 628 566 519 493 477 487 485 492 491 484	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479	659 644 637 595 536 493 456 462 460 470 482 481 482	443 421 422 431 430 426 425 426 428 430 422 409 410	JULY 410 405 415 418 421 420 420 422 422 407 404 404 404	433 411 418 424 425 422 423 424 425 413 410 406 408	398 398 394 390 396 409 409 395 415 415 411 408	386 387 380 377 380 375 382 376 376 393 406 405 400	392 391 388 384 387 389 392 383 386 403 408 408	400 399 402 404 389 394 401 411 414 416 413 415 416	395 395 395 395 384 384 384 400 400 400 408 408 411 413	398 398 399 400 387 391 398 406 412 413 411 413
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	660 660 643 628 566 519 493 477 487 485 492 491 484 480 476	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479 472 469	659 644 637 595 536 493 456 462 460 470 482 481 482 477 473	443 421 422 431 430 426 425 426 428 430 422 409 410 412	JULY 410 405 415 418 421 420 420 422 407 404 404 401 404	433 411 418 424 425 422 423 424 425 413 410 406 408 405 408	398 398 394 390 396 409 409 395 415 415 411 408 403 410	386 387 380 377 380 375 382 376 376 376 393 406 405 400 401	392 391 388 384 387 389 392 383 386 403 408 404 401 404	400 399 402 404 389 394 401 411 414 416 413 415 416 416 419	395 395 395 395 384 384 384 409 409 408 408 411 413 409 413	398 398 399 400 387 391 398 406 412 413 411 413 414 411
1 2 3 4 5 6 7 8 9 10 11 12 13 14	660 660 643 628 566 519 493 477 485 492 491 484 480	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479 472	659 644 637 595 536 493 456 462 460 470 482 481 482 477	443 421 422 431 430 426 425 426 428 430 422 409 410 410	JULY 410 405 415 418 421 420 422 407 404 404 404 401	433 411 418 424 425 423 424 425 413 410 406 408 405	398 398 394 390 396 409 409 395 415 415 411 408 403	386 387 380 377 380 375 382 376 376 393 406 405 400 400	392 391 388 384 387 389 392 383 386 403 408 408 404 401	400 399 402 404 389 394 401 411 414 416 413 415 416	395 395 395 395 384 384 389 400 409 408 411 413 409	398 398 399 400 387 391 398 406 412 413 411 413 414 411
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	660 660 643 628 566 519 493 477 487 485 492 491 484 480 476	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479 472 469 465 458	659 644 637 595 536 493 456 462 460 470 481 482 477 473 469 463 458	443 421 422 431 430 426 425 426 428 430 422 409 410 410 412	JULY 410 405 415 418 421 420 420 422 407 404 404 401 404 400 361	433 411 418 424 425 422 423 424 425 413 410 406 408 405 408 408 408 408	398 398 394 390 396 409 409 395 415 415 411 408 403 410	386 387 380 377 380 375 382 376 376 376 393 406 405 400 400 401 406 406 406	392 391 388 384 387 389 392 383 386 403 408 404 401 401 409 409 409	400 399 402 404 389 394 401 411 414 416 413 415 416 416 419 420 419 421	395 395 395 395 384 384 384 400 409 408 408 411 413 409 413 414 415	398 398 399 400 387 391 398 406 412 413 411 413 414 411 416
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	660 660 643 628 566 519 493 497 485 492 491 480 476 473 470 462 461	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479 472 469 465 458 453 455	659 644 637 595 536 493 456 462 460 470 482 481 482 477 473 469 463 458 458	443 421 422 431 430 426 425 426 428 430 422 409 410 410 412 413 406 404 417	JULY 410 405 415 418 421 420 420 422 407 404 404 404 401 404 400 361 389	433 411 418 424 425 422 423 424 425 413 410 406 408 405 408 403 391 402	398 398 394 390 396 409 409 395 415 411 408 403 410 413 412 415	386 387 380 377 380 375 382 376 376 393 406 405 400 401 406 406 406 406 406 405	392 391 388 384 387 389 392 383 386 403 408 404 401 404 409 409 409 410	400 399 402 404 389 394 401 411 414 416 413 415 416 419 420 419 421 422	395 395 395 384 384 384 389 3940 409 408 411 413 409 413 414 415 417	398 398 399 400 387 391 398 406 412 413 411 413 411 416 418 417 417 421
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	660 660 643 628 566 519 493 477 487 485 492 491 484 480 476	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479 472 469 465 458	659 644 637 595 536 493 456 462 460 470 481 482 477 473 469 463 458	443 421 422 431 430 426 425 426 428 430 422 409 410 410 412	JULY 410 405 415 418 421 420 420 422 407 404 404 401 404 400 361	433 411 418 424 425 422 423 424 425 413 410 406 408 405 408 408 408 408	398 398 394 390 396 409 409 395 415 415 411 408 403 410	386 387 380 377 380 375 382 376 376 376 393 406 405 400 400 401 406 406 406	392 391 388 384 387 389 392 383 386 403 408 404 401 401 409 409 409	400 399 402 404 389 394 401 411 414 416 413 415 416 416 419 420 419 421	395 395 395 395 384 384 384 400 409 408 408 411 413 409 413 414 415	398 398 399 400 387 391 398 406 412 413 411 413 414 411 416
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	660 660 643 628 566 519 493 477 485 492 491 484 480 476 473 470 462 461 459	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479 472 469 465 458 453 397	659 644 637 595 536 493 456 462 460 470 482 481 482 477 473 469 463 458 458 437	443 421 422 431 430 426 425 426 428 430 422 409 410 410 412 413 406 404 417 397	JULY 410 405 415 418 421 420 420 422 407 404 404 404 401 404 400 361 389 387 385	433 411 418 424 425 422 423 424 425 413 410 406 408 405 408 403 391 402 392 389	398 398 394 390 396 409 409 395 415 415 411 408 403 410 413 412 415 415	386 387 380 377 380 375 382 376 376 393 406 405 400 401 406 406 406 406 407 409	392 391 388 384 387 389 392 383 386 403 408 404 401 404 401 404 409 409 410 410 411	400 399 402 404 389 394 401 411 414 416 413 415 416 419 420 419 421 422 419	395 395 395 384 384 384 389 3940 409 408 411 413 409 413 414 415 417 410	398 398 399 400 387 391 398 406 412 413 411 413 414 411 416 418 417 421 414 412
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	660 660 643 628 566 519 493 477 485 492 491 484 480 476 473 470 462 461 459	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479 479 469 465 458 453 397	659 644 637 595 536 493 456 462 460 470 482 481 482 477 473 469 463 458 458 437	443 421 422 431 430 426 425 428 430 422 409 410 410 412 413 406 404 417 397	JULY 410 405 415 418 421 420 420 422 407 404 404 404 401 400 361 389 387 385 387	433 411 418 424 425 422 423 424 425 413 410 406 408 405 408 403 391 402 392 389 389	398 398 394 390 396 409 409 395 415 415 411 408 403 410 413 412 415 415 415	386 387 380 377 380 375 382 376 376 393 406 405 400 401 406 406 406 407 407	392 391 388 384 387 389 392 383 386 403 408 404 401 404 409 409 409 410 410 411	400 399 402 404 389 394 401 411 414 416 413 415 416 419 420 419 421 422 419	395 395 395 395 384 384 389 394 400 409 408 411 413 409 413 414 415 417 410 408 408	398 398 399 400 387 391 398 406 412 413 411 413 414 416 417 417 427 421 414 412 410
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	660 660 643 628 566 519 493 477 485 492 491 484 480 476 473 470 462 461 459	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479 479 479 475 469 465 458 453 455 397 365 404 413	659 644 637 595 536 493 456 462 460 470 482 477 473 469 463 458 458 437	443 421 422 431 430 426 425 426 428 430 422 409 410 411 412 413 406 404 417 397	JULY 410 405 418 421 420 420 422 407 404 404 404 400 361 389 387 385 387	433 411 418 424 425 422 423 424 425 413 410 406 408 405 408 403 391 402 392 389 389 400	398 398 394 390 396 409 395 415 415 411 408 403 410 413 412 415 415 415	386 387 380 377 380 375 382 376 393 406 405 400 400 401 406 406 406 407 407 409 410 408	392 391 388 384 387 389 392 383 386 403 408 404 401 404 409 409 410 411 411 411	400 399 402 404 389 394 401 411 414 416 413 415 416 419 420 419 421 422 419	395 395 395 395 395 384 384 389 394 400 408 411 413 409 413 414 415 417 410 408 408 408	398 398 399 400 387 391 398 406 412 413 411 413 414 411 416 418 417 421 414 417 421 414 411 417
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	660 660 643 628 566 519 493 477 485 492 491 484 480 476 473 470 462 461 459 419 421 421	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479 479 469 465 458 453 397	659 644 637 595 536 493 456 462 460 470 482 481 482 477 473 469 463 458 458 437	443 421 422 431 430 426 425 428 430 422 409 410 410 412 413 406 404 417 397	JULY 410 405 415 418 421 420 420 422 407 404 404 404 401 400 361 389 387 385 387	433 411 418 424 425 422 423 424 425 413 410 406 408 405 408 403 391 402 392 389 389	398 398 394 390 396 409 409 395 415 415 411 408 403 410 413 412 415 415 415	386 387 380 377 380 375 382 376 376 393 406 405 400 401 406 406 406 407 407	392 391 388 384 387 389 392 383 386 403 408 404 401 404 409 409 409 410 410 411	400 399 402 404 389 394 401 411 414 416 413 415 416 419 420 419 421 422 419	395 395 395 395 384 384 389 394 400 409 408 411 413 409 413 414 415 417 410 408 408	398 398 399 400 387 391 398 406 412 413 411 413 414 416 417 417 427 421 414 412 410
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	660 660 643 628 566 519 493 477 485 492 491 484 480 476 473 470 462 461 459 419 421 414 413	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479 472 469 465 458 453 455 397 365 404 413 405 401	659 644 637 595 536 493 456 462 460 470 482 481 482 477 473 469 463 458 458 458 437 384 415 416 412 407	443 421 422 431 430 426 425 426 428 430 422 409 410 410 412 413 406 404 417 397 394 392 408 411 403	JULY 410 405 415 418 421 420 422 407 404 404 404 401 400 361 389 387 385 387 390 400 400	433 411 418 424 425 422 423 424 425 413 410 406 408 405 408 405 408 407 391 402 392 389 400 404 401	398 398 394 390 396 409 409 395 415 415 411 408 403 410 413 412 415 415 415 415 415 411 411 411	386 387 380 377 380 375 382 376 393 406 405 400 401 406 406 406 406 407 409 409 405	392 391 388 384 387 389 392 383 386 403 408 404 401 404 409 409 410 410 411 411 410 408	400 399 402 404 389 394 401 411 414 416 413 415 416 419 420 419 421 422 419 411 416 422 424	395 395 395 395 395 384 384 389 394 400 408 411 413 409 413 414 415 417 410 408 408 409 415 422	398 398 399 400 387 391 398 406 412 413 411 413 414 411 416 418 417 421 417 421 414 411 414 411 415 417 421 413 414 411 415 417 421 413 414 414 417 421 421 421 421 421 421 421 421 421 421
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	660 660 643 628 566 519 493 477 485 492 491 480 476 473 470 461 459 419 421 421 421 414	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479 472 469 465 458 453 397 365 404 413	659 644 637 595 536 493 456 462 460 470 482 481 482 477 473 469 463 458 458 437	443 421 422 431 430 426 425 426 428 430 422 409 410 412 413 406 404 417 397 394 392 408 411	JULY 410 405 415 418 421 420 420 422 422 407 404 404 404 401 404 400 361 389 387 385 387 385 387	433 411 418 424 425 423 424 425 413 410 406 408 405 408 403 391 402 392 389 400 404	398 398 394 390 396 409 409 395 415 415 411 408 403 410 413 412 415 415 415 415 415	386 387 380 377 380 375 382 376 376 393 406 405 400 401 406 406 406 407 407 409 410 409	392 391 388 384 387 389 392 383 386 403 408 404 401 404 409 409 410 410 411 411 411 410 410	400 399 402 404 389 394 401 411 414 416 413 415 416 419 420 419 421 422 419 411 412 419	395 395 395 384 384 384 389 3940 409 408 411 413 409 413 414 415 417 410 408 408 408 408 408 408 408 408 408 40	398 398 399 400 387 391 398 406 412 413 411 414 411 416 418 417 421 414 412 410 413 418
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	660 660 643 628 566 519 493 477 485 492 491 484 480 476 473 470 462 461 459 419 421 414 413 408 419	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479 472 469 465 458 453 455 397 365 401 393 405 401	659 644 637 595 536 493 456 462 460 470 482 481 482 477 473 463 458 458 458 437 384 415 416 412 407	443 421 422 431 430 426 425 426 428 430 422 409 410 410 411 412 413 406 404 417 397 394 392 408 411 406 408	JULY 410 405 415 418 421 420 422 407 404 404 404 404 400 361 389 387 385 387 390 400 400 403 405 403	433 411 418 424 425 422 423 424 425 413 410 406 408 405 408 405 408 400 391 402 392 389 400 404 401 405 401	398 398 394 390 396 409 409 395 415 415 411 408 403 410 413 412 415 415 415 415 411 411 411 413 408 409 409 409 409 409 409 409 409 409 409	386 387 380 377 380 375 382 376 393 406 405 400 401 406 406 406 406 406 407 409 409 405	392 391 388 384 387 389 392 383 386 403 408 404 401 404 409 409 410 410 411 411 410 408	400 399 402 404 389 394 401 411 414 416 413 415 416 419 420 419 421 422 419 411 416 422 424 425 427 425	395 395 395 395 395 384 384 389 394 400 408 411 413 414 415 417 410 408 408 409 415 417 410 408 408 409 415 417 410	398 398 399 400 387 391 398 406 412 413 411 413 414 411 416 418 417 421 417 421 414 412 410 413 414 413 414 412 413 414 412 413 414 415 417 417 421 421 421 421 421 421 421 421 421 421
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	660 660 643 628 566 519 493 477 485 492 491 480 476 473 470 461 459 419 421 421 421 421 421 421 421 421 421 433	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479 472 469 465 458 453 397 365 404 413 405 401 393 402 409	659 644 637 595 536 493 456 462 460 470 482 481 482 477 473 469 463 458 458 437 384 415 416 412 407	443 421 422 431 430 426 425 426 428 430 422 409 410 412 413 406 404 417 397 394 392 408 411 403 406 408 406 406 404	JULY 410 405 415 418 421 420 420 422 422 407 404 404 404 401 404 400 361 389 387 385 387 385 387 390 400 400 403 405 403 405 403	433 411 418 424 425 423 424 425 413 410 406 408 405 408 403 391 402 392 389 400 404 401 405 407 404 402	398 398 394 390 396 409 409 395 415 415 411 408 403 410 413 415 415 415 415 415 411 411 411 413 408 400 401 391	386 387 380 377 380 375 382 376 376 393 406 405 400 401 406 406 406 407 409 409 405 397 393 387 393 387 377	392 391 388 384 387 389 392 383 386 403 408 404 401 404 401 401 410 410 410 410 410	400 399 402 404 389 394 401 411 414 416 413 415 416 419 420 419 421 422 419 411 412 422 424 425 425 422 422	395 395 395 384 384 384 389 3940 409 408 411 413 409 413 414 415 417 410 408 408 409 415 422 421 420 416 418	398 398 399 400 387 391 398 406 412 413 411 413 414 411 416 418 417 421 414 412 410 413 414 423 423 420
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	660 660 643 628 566 519 493 477 485 492 491 484 480 476 473 470 462 461 459 419 421 414 413 408 419	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479 472 469 465 458 453 455 397 365 401 393 405 401	659 644 637 595 536 493 456 462 460 470 482 481 482 477 473 463 458 458 458 437 384 415 416 412 407	443 421 422 431 430 426 425 426 428 430 422 409 410 410 411 412 413 406 404 417 397 394 392 408 411 406 408	JULY 410 405 415 418 421 420 422 407 404 404 404 404 400 361 389 387 385 387 390 400 400 403 405 403	433 411 418 424 425 422 423 424 425 413 410 406 408 405 408 405 408 400 391 402 392 389 400 404 401 405 401	398 398 394 390 396 409 409 395 415 415 411 408 403 410 413 412 415 415 415 415 411 411 411 413 408 409 409 409 409 409 409 409 409 409 409	386 387 380 377 380 375 382 376 393 406 405 400 401 406 406 406 406 406 407 409 409 405	392 391 388 384 387 389 392 383 386 403 408 404 401 404 409 409 410 410 411 411 410 408	400 399 402 404 389 394 401 411 414 416 413 415 416 419 420 419 421 422 419 411 416 422 424 425 427 425	395 395 395 395 395 384 384 389 394 400 408 411 413 414 415 417 410 408 408 409 415 417 410 408 408 409 415 417 410	398 398 399 400 387 391 398 406 412 413 411 413 414 411 416 418 417 421 417 421 414 412 410 413 414 413 414 412 413 414 412 413 414 415 417 417 421 421 421 421 421 421 421 421 421 421
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	660 660 643 628 566 519 493 477 485 492 491 480 476 473 470 461 459 419 421 421 421 414 413 408 442 449 430 443 	JUNE 655 635 628 532 464 440 422 451 466 477 479 472 469 465 458 453 397 365 404 413 405 401 393 402 409 417	659 644 637 595 536 493 456 462 460 470 482 481 482 477 473 469 463 458 437 384 415 416 412 407 401 422 415 433	443 421 422 431 430 426 428 430 422 409 410 412 413 406 404 417 397 394 392 408 411 403 406 408 404 406 404 402 395	JULY 410 405 415 418 421 420 420 422 422 407 404 404 404 401 404 400 361 389 387 385 387 390 400 400 403 405 403 405 403 407	433 411 418 424 425 423 424 425 413 410 406 408 405 408 403 391 402 392 389 400 404 401 405 407 407 404 402 396 391	398 398 394 390 396 409 409 395 415 415 411 408 403 410 413 415 415 415 415 411 411 413 408 400 401 391 389 412	386 387 380 377 380 375 382 376 376 393 406 405 400 401 406 406 406 407 409 409 405 397 393 387 377 378 385	392 391 388 384 387 389 392 383 386 403 408 404 401 404 401 401 410 410 410 410 410	400 399 402 404 389 394 401 411 414 416 413 415 416 419 420 419 421 422 419 411 412 422 425 425 425 425 425 425 42	395 395 395 384 384 384 389 3940 409 408 411 413 409 413 414 415 417 410 408 408 408 409 415 422 421 420 	398 398 399 400 387 391 398 406 412 413 411 413 414 411 416 418 417 421 410 413 414 412 410 413 423 423 420 422
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	660 660 643 628 566 519 493 477 485 492 491 480 476 473 470 462 459 419 421 421 414 413 408 442 443 443	JUNE 655 635 628 532 464 440 422 450 447 451 466 477 479 469 465 458 453 397 365 404 413 405 401 393 402 409 417	659 644 637 595 536 493 456 462 460 470 482 481 482 477 473 469 463 458 458 437 384 415 416 412 407	443 421 422 431 430 426 425 428 430 422 409 410 412 413 406 404 417 397 394 392 408 411 403 406 408 406 404 407	JULY 410 405 415 418 421 420 420 422 407 404 404 404 401 404 400 361 389 387 385 387 390 400 400 403 405 403 405 403 407	433 411 418 424 425 423 424 425 413 410 406 408 405 408 403 391 402 392 389 400 404 401 405 407 404 401	398 398 394 390 396 409 409 395 415 415 411 408 403 410 413 412 415 415 415 415 415 411 413 408 400 401 391 389	386 387 380 377 380 375 382 376 393 406 405 400 401 406 406 406 406 407 409 410 408 409 405 397 393 387 377 378	392 391 388 384 387 389 392 383 386 403 408 404 401 404 409 409 410 410 411 411 410 408 405 398 394 382 382	400 399 402 404 389 394 401 411 414 416 413 415 416 419 420 419 421 422 419 413 411 416 422 424 425 427 425 425 425	395 395 395 395 384 384 389 394 400 409 408 411 413 409 413 414 415 417 410 408 408 408 409 415 422 421 420 416 418 420	398 398 399 400 387 391 398 406 412 413 411 413 414 411 416 418 417 417 417 417 417 414 412 410 413 418 423 423 423 420 422
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	660 660 643 628 566 519 493 477 485 492 491 480 476 473 470 461 459 419 421 421 421 414 413 408 442 449 430 443 	JUNE 655 635 628 532 464 440 422 451 466 477 479 472 469 465 458 453 397 365 404 413 405 401 393 402 409 417	659 644 637 595 536 493 456 462 460 470 482 481 482 477 473 469 463 458 437 384 415 416 412 407 401 422 415 433	443 421 422 431 430 426 428 430 422 409 410 412 413 406 404 417 397 394 392 408 411 403 406 408 404 406 404 402 395	JULY 410 405 415 418 421 420 420 422 422 407 404 404 404 401 404 400 361 389 387 385 387 390 400 400 403 405 403 405 403 407	433 411 418 424 425 423 424 425 413 410 406 408 405 408 403 391 402 392 389 400 404 401 405 407 407 404 402 396 391	398 398 394 390 396 409 409 395 415 415 411 408 403 410 413 415 415 415 415 411 411 413 408 400 401 391 389 412	386 387 380 377 380 375 382 376 376 393 406 405 400 401 406 406 406 407 409 409 405 397 393 387 377 378 385	392 391 388 384 387 389 392 383 386 403 408 404 401 404 401 401 410 410 410 410 410	400 399 402 404 389 394 401 411 414 416 413 415 416 419 420 419 421 422 419 411 412 422 425 425 425 425 425 425 42	395 395 395 384 384 384 389 3940 409 408 411 413 409 413 414 415 417 410 408 408 408 409 415 422 421 420 	398 398 399 400 387 391 398 406 412 413 411 413 414 411 416 418 417 421 410 413 414 412 410 413 423 423 420 422

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06892450 OLATHE LAKE NEAR OLATHE, KS--Continued PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN N	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		OCTOBER		N	OVEMBER		DE	ECEMBER			JANUAR	Y
1	7.4	7.3	7.3									
2	7.6	7.3	7.5									
4	7.7 7.5	7.5 7.3	7.6 7.4									
5	7.5	7.1	7.4									
6	7.2	7.1	7.1									
7	7.2	7.1	7.1									
8	7.2	7.0	7.1									
9 10	7.1 7.1	7.1 7.1	7.1 7.1									
10	/.1	/.1	/.1									
11	7.2	7.1	7.1									
12 13	7.2 7.2	7.1 7.1	7.1 7.1									
14	7.6	7.1	7.2									
15	7.2	7.1	7.2									
16	7.2	7.1	7.2									
17	7.2	7.1	7.1									
18	7.2	7.0	7.1									
19 20	7.0 7.0	7.0 7.0	7.0 7.0									
20		,										
21	7.0	7.0	7.0									
22 23												
24												
25												
26												
27												
28 29												
30												
31												
MAX	7.7	7.5	7.6									
MIN	7.0	7.0	7.0									
LILLIA												
11111												
DAY	MAX	MIN M		MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	MAX			MAX		MEDIAN			MEDIAN	MAX		MEDIAN
	MAX	MIN 1		MAX	MIN MARCH	MEDIAN		MIN APRIL	MEDIAN	MAX	MIN MAY	MEDIAN
DAY 1	MAX	FEBRUARY	MEDIAN		MARCH		8.2	APRIL 8.0	8.2	8.6	MAY 8.5	8.5
DAY 1 2	MAX :	FEBRUARY	MEDIAN 		MARCH		8.2 8.4	APRIL 8.0 8.1	8.2 8.2	8.6 8.5	MAY 8.5 8.4	8.5 8.5
DAY 1	MAX	FEBRUARY	MEDIAN		MARCH		8.2	APRIL 8.0	8.2	8.6	MAY 8.5	8.5
DAY 1 2 3	MAX	FEBRUARY	MEDIAN 	 	MARCH		8.2 8.4 8.3	8.0 8.1 8.2	8.2 8.2 8.2	8.6 8.5 8.6	MAY 8.5 8.4 8.4	8.5 8.5 8.5
DAY 1 2 3 4 5	MAX	FEBRUARY	MEDIAN		MARCH	 	8.2 8.4 8.3 8.2 8.3	8.0 8.1 8.2 8.1 8.1	8.2 8.2 8.2 8.2 8.2	8.6 8.5 8.6 8.5	MAY 8.5 8.4 8.4 8.4	8.5 8.5 8.5 8.5
DAY 1 2 3 4 5	MAX :	FEBRUARY 	MEDIAN	 	MARCH	 	8.2 8.4 8.3 8.2 8.3	APRIL 8.0 8.1 8.2 8.1	8.2 8.2 8.2 8.2 8.2 8.2	8.6 8.5 8.6 8.5	MAY 8.5 8.4 8.4 8.4	8.5 8.5 8.5 8.4 8.3
DAY 1 2 3 4 5 6 7 8	MAX	FEBRUARY	MEDIAN	 	MARCH		8.2 8.4 8.3 8.2 8.3 8.3	8.0 8.1 8.2 8.1 8.1 8.1	8.2 8.2 8.2 8.2 8.2 8.2	8.6 8.5 8.6 8.5 8.5 8.4 8.4	MAY 8.5 8.4 8.4 8.3 8.3 8.3	8.5 8.5 8.5 8.5 8.4 8.3 8.3
DAY 1 2 3 4 5	MAX :	FEBRUARY	MEDIAN	 	MARCH	 	8.2 8.4 8.3 8.2 8.3	8.0 8.1 8.2 8.1 8.1 8.1	8.2 8.2 8.2 8.2 8.2 8.2	8.6 8.5 8.6 8.5 8.5	MAY 8.5 8.4 8.4 8.3 8.3	8.5 8.5 8.5 8.4 8.3
DAY 1 2 3 4 5 6 7 8 9 10	MAX ::	FEBRUARY	 	 	MARCH		8.2 8.4 8.3 8.2 8.3 8.3 8.2 8.5	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.3	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2	8.6 8.5 8.5 8.5 8.4 8.4 8.6 8.7	MAY 8.5 8.4 8.4 8.3 8.3 8.1 8.2 8.5	8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5
DAY 1 2 3 4 5 6 7 8 9 10 11	MAX	FEBRUARY	MEDIAN	 	MARCH	 	8.2 8.4 8.3 8.2 8.3 8.3 8.3 8.5 8.5	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.3	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.4 8.3	8.6 8.5 8.5 8.5 8.4 8.4 8.7 8.6 8.7	MAY 8.5 8.4 8.4 8.3 8.3 8.1 8.2 8.4 8.5	8.5 8.5 8.5 8.4 8.3 8.4 8.5 8.5
DAY 1 2 3 4 5 6 7 8 9 10	MAX ::	FEBRUARY	#EDIAN		MARCH		8.2 8.4 8.3 8.2 8.3 8.3 8.2 8.5	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.3	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2	8.6 8.5 8.5 8.5 8.4 8.4 8.6 8.7	MAY 8.5 8.4 8.4 8.3 8.3 8.1 8.2 8.5	8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14	MAX ::	FEBRUARY	4EDIAN	 7.9	MARCH	 7.9	8.2 8.4 8.3 8.2 8.3 8.3 8.5 8.5 8.5 8.5	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.3 8.2 8.1	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4 8.3 8.1 8.3	8.6 8.5 8.5 8.5 8.4 8.4 8.7 8.6 8.5 8.5 8.5	MAY 8.5 8.4 8.4 8.3 8.3 8.3 8.3 8.3 8.4 8.5	8.5 8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.5 8.5
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13	MAX ::	FEBRUARY		 7.9	MARCH	 7.9	8.2 8.4 8.3 8.2 8.3 8.3 8.2 8.5 8.5 8.5	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.3 8.2 8.1	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4	8.6 8.5 8.5 8.5 8.4 8.6 8.7 8.6 8.5 8.5	MAY 8.5 8.4 8.4 8.3 8.3 8.3 8.1 8.2 8.4 8.5	8.5 8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.5 8.5
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	MAX ::	FEBRUARY	4EDIAN	 7.9 7.9 7.9	MARCH 7.8 7.9	 7.9 7.9 7.9	8.2 8.4 8.3 8.2 8.3 8.3 8.5 8.5 8.5 8.5 8.5	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.3 8.2 8.1 8.2	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4 8.3 8.1 8.3 8.2	8.6 8.5 8.5 8.5 8.4 8.4 8.7 8.6 8.5 8.5 8.5 8.5	MAY 8.5 8.4 8.4 8.3 8.3 8.1 8.2 8.4 8.5 8.3 8.4 8.5	8.5 8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.5 8.5 8.6 8.6
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	MAX ::	FEBRUARY	#EDIAN	 7.9 7.9 7.9 8.0	MARCH 7.8 7.9 7.9	 7.9 7.9 7.9	8.2 8.4 8.3 8.2 8.3 8.3 8.5 8.5 8.5 8.4 8.4 8.3	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.3 8.2 8.1 8.2 8.1	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4 8.3 8.1 8.2 8.3 8.2	8.6 8.5 8.5 8.5 8.4 8.4 8.7 8.6 8.5 8.5 8.6 8.5 8.5	MAY 8.5 8.4 8.4 8.3 8.3 8.1 8.2 8.5 8.4 8.5 8.5 8.5 8.5	8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.5 8.5 8.6 8.6
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	MAX ::	FEBRUARY	4EDIAN	 7.9 7.9 7.9	MARCH 7.8 7.9	 7.9 7.9 7.9	8.2 8.4 8.3 8.2 8.3 8.3 8.5 8.5 8.5 8.5 8.5	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.3 8.2 8.1 8.2	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4 8.3 8.1 8.3 8.2	8.6 8.5 8.5 8.5 8.4 8.4 8.7 8.6 8.5 8.5 8.5 8.5	MAY 8.5 8.4 8.4 8.3 8.3 8.1 8.2 8.4 8.5 8.3 8.4 8.5	8.5 8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.5 8.5 8.6 8.6
DAY 1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18	MAX	FEBRUARY	#EDIAN	 7.9 7.9 7.9 8.0	MARCH 7.8 7.8 7.9 7.9	 7.9 7.9 7.9	8.2 8.4 8.3 8.2 8.3 8.3 8.2 8.5 8.5 8.5 8.5 8.4 8.4 8.3	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.3 8.2 8.2 8.1 8.2	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4 8.3 8.1 8.2 8.3 8.2	8.6 8.5 8.5 8.5 8.4 8.6 8.6 8.5 8.5 8.6 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5	MAY 8.5 8.4 8.4 8.3 8.1 8.2 8.4 8.5 8.3 8.4 8.5 8.3 8.4 8.4 8.5	8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.5 8.6 8.6 8.6
DAY 1 2 3 4 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	MAX ::	FEBRUARY	4EDIAN	 7.9 7.9 7.9 8.0 8.0 8.1	MARCH 7.8 7.8 7.9 7.9 7.9	 7.9 7.9 7.9 7.9 7.9	8.2 8.4 8.3 8.2 8.3 8.3 8.2 8.5 8.5 8.5 8.4 8.4 8.4 8.3	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.2 8.2 8.2 8.1 8.2	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4 8.3 8.1 8.2 8.3 8.1 8.2 8.3 8.1	8.6 8.5 8.5 8.5 8.4 8.6 8.6 8.7 8.6 8.5 8.5 8.6 8.5 8.6 8.5 8.5 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6	MAY 8.5 8.4 8.4 8.3 8.1 8.2 8.4 8.5 8.3 8.4 8.5 8.5 8.5 8.5 8.5 8.1	8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.5 8.6 8.6 8.6 8.6 8.2 8.2
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	MAX ::	FEBRUARY	#EDIAN	 7.9 7.9 7.9 7.9 8.0 8.0 8.1 8.4 8.3	MARCH 7.8 7.9 7.9 7.9 7.9 7.9 7.9 7.8 8.1	 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	8.2 8.4 8.3 8.2 8.3 8.3 8.5 8.5 8.5 8.5 8.4 8.4 8.3 8.1 8.2	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.2 8.2 8.1 8.2 8.2 8.0 8.0 8.0	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4 8.3 8.1 8.3 8.2 8.3 8.2 8.3 8.1 8.3 8.1	8.65 8.56 8.55 8.4 8.67 8.65 8.66 8.55 8.66 8.66 8.66 8.78 8.66 8.78 8.66 8.78 8.78	MAY 8.5 8.4 8.4 8.3 8.3 8.1 8.2 8.5 8.4 8.5 8.5 8.7 8.7 8.7	8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.5 8.6 8.6 8.6 8.6 8.7 8.2
DAY 1 2 3 4 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	MAX	FEBRUARY	#EDIAN	 7.9 7.9 7.9 8.0 8.0 8.1 8.4 8.3 8.2	MARCH 7.8 7.8 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	8.2 8.4 8.3 8.2 8.3 8.3 8.2 8.5 8.5 8.5 8.5 8.2 8.4 8.3 8.1 8.2 8.1 8.2	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.2 8.2 8.1 8.2 8.0 8.0 8.0 8.0 8.0	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4 8.3 8.1 8.2 8.3 8.2 8.2 8.1 8.1 8.1 8.1	8.6 8.5 8.5 8.5 8.4 8.6 8.6 8.5 8.6 8.5 8.6 8.5 8.6 8.7 8.6 8.5 8.7 8.6 8.7 8.7 8.7 8.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9	MAY 8.5 8.4 8.4 8.3 8.3 8.1 8.2 8.4 8.5 8.3 8.4 8.5 8.5 8.7 8.7 8.7	8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.5 8.6 8.6 8.6 8.6 8.2 8.2 8.2
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	MAX ::	FEBRUARY	#EDIAN	 7,9 7,9 7,9 7,9 8.0 8.0 8.1 8.4 8.3 8.2 8.2	MARCH	 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	8.2 8.4 8.3 8.2 8.3 8.3 8.5 8.5 8.5 8.5 8.4 8.4 8.3 8.1 8.2 8.1 8.2	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.3 8.2 8.1 8.2 8.2 8.2 8.0 8.0 8.0 8.0 8.0	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4 8.3 8.1 8.3 8.2 8.3 8.2 8.3 8.1 8.1 8.1 8.1	8.65 8.56 8.55 8.4 8.66 8.7 8.66 8.55 8.66 8.7 8.65 8.66 8.7 8.65 8.7 8.65 8.7 8.7 8.7 8.7 8.7 8.7 8.7 8.7 8.7 8.7	MAY 8.5 8.4 8.4 8.3 8.3 8.1 8.2 8.4 8.5 8.3 8.4 8.5 7.8 7.8	8.5 8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.6 8.6 8.6 8.6 8.5 8.2 8.2 8.4 7.9 7.8 7.8
DAY 1 2 3 4 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	MAX	FEBRUARY	#EDIAN	 7.9 7.9 7.9 8.0 8.0 8.0 8.1 8.4 8.3 8.2 8.0 8.0	MARCH 7.8 7.8 7.9 7.9 7.9 7.9 7.9 7.9 7.8 8.1 7.8 7.8 8.0	 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	8.2 8.4 8.3 8.2 8.3 8.3 8.2 8.5 8.5 8.5 8.5 8.4 8.4 8.3 8.1 8.2 8.1 8.2 8.1 8.2	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.2 8.2 8.1 8.2 8.2 8.1 8.0 8.0 8.0 8.0 8.0 7.9	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4 8.3 8.1 8.2 8.3 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.65 8.56 8.55 8.4 8.67 8.6 8.55 8.66 8.55 8.66 8.76 8.54 8.67 7.99 7.88	MAY 8.5 8.4 8.4 8.3 8.3 8.1 8.2 8.4 8.5 8.3 8.4 8.7 8.7 8.7 8.7	8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.5 8.6 8.6 8.6 8.6 8.7 8.2 8.2 8.2 8.2
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	MAX ::	FEBRUARY	4EDIAN	 7.9 7.9 7.9 7.9 8.0 8.0 8.1 8.4 8.3 8.2 8.0 8.0	MARCH	 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 8.1 8.2 8.1	8.2 8.4 8.3 8.2 8.3 8.3 8.5 8.5 8.5 8.5 8.5 8.2 8.4 8.4 8.3 8.1 8.2 8.1 8.2	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.3 8.2 8.1 8.2 8.2 8.1 8.0 8.0 8.0 8.0 8.0 8.0 8.0	8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4 8.3 8.1 8.4 8.3 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.65 8.56 8.55 8.4 8.66 8.7 8.6 8.55 8.66 8.7 8.65 8.65 8.65 8.7 7.8 8.6 7.9 7.8 7.9	MAY 8.5 8.4 8.4 8.3 8.3 8.1 8.2 8.4 8.5 8.3 8.4 8.5 8.7 8.7 8.7 8.7	8.5 8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.6 8.6 8.6 8.6 8.6 8.7 8.2 8.2 8.4 7.8 7.8 7.8
DAY 1 2 3 4 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	MAX	FEBRUARY	#EDIAN	 7.9 7.9 7.9 8.0 8.0 8.0 8.1 8.4 8.3 8.2 8.0 8.0	MARCH 7.8 7.8 7.9 7.9 7.9 7.9 7.9 7.9 7.8 8.1 7.8 7.8 8.0	 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	8.2 8.4 8.3 8.2 8.3 8.3 8.2 8.5 8.5 8.5 8.5 8.4 8.4 8.3 8.1 8.2 8.1 8.2 8.1 8.2	8.0 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.2 8.2 8.1 8.2 8.2 8.1 8.0 8.0 8.0 8.0 8.0 7.9	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4 8.3 8.1 8.2 8.3 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.65 8.56 8.55 8.4 8.67 8.6 8.55 8.66 8.55 8.66 8.76 8.54 8.67 7.99 7.88	MAY 8.5 8.4 8.4 8.3 8.3 8.1 8.2 8.4 8.5 8.3 8.4 8.7 8.7 8.7 8.7	8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.5 8.6 8.6 8.6 8.6 8.7 8.9
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	MAX ::	FEBRUARY	4EDIAN	 7.9 7.9 7.9 7.9 8.0 8.0 8.1 8.4 8.3 8.2 8.0 8.0 8.0	MARCH	 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 8.1 8.2 8.0 8.0 8.1 8.1 8.1	8.2 8.4 8.3 8.2 8.3 8.3 8.5 8.5 8.5 8.5 8.5 8.2 8.4 8.4 8.3 8.1 8.2 8.1 8.2 8.1 8.2	APRIL 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4 8.3 8.1 8.3 8.2 8.3 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.65 8.55 8.44 8.68 8.78 8.68 8.65 8.65 8.65 8.66 8.77 7.88 7.99 7.88 7.99 7.88 7.88 7.88	MAY 8.5 8.4 8.4 8.3 8.3 8.1 8.2 8.4 8.5 8.4 8.5 8.7 8.7 8.7 8.8 7 8.8 7 8.8 7 8.8 8.5	8.5 8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.6 8.6 8.6 8.6 8.6 8.7 8.2 8.2 8.4 7.9 7.8 7.8 7.8 7.8 7.8 7.8 7.8
DAY 1 2 3 4 4 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	MAX	FEBRUARY	##DIAN	 7.9 7.9 7.9 7.9 8.0 8.0 8.1 8.4 8.3 8.2 8.0 8.0 8.1	MARCH 7.8 7.9 7.9 7.9 7.9 7.9 7.8 8.1 7.8 7.8 7.9 7.9 7.9 7.9 7.9 7.9 7.9	 7.9 7.9 7.9 7.9 7.9 7.9 7.9 8.1 8.2 8.1 7.9 8.0 8.1 8.1 8.1	8.2 8.4 8.3 8.3 8.3 8.5 8.5 8.5 8.5 8.5 8.4 8.4 8.3 8.1 8.2 8.1 8.2 8.1 8.2 8.1 8.2 8.1 8.2 8.1 8.2 8.1 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	APRIL 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.2 8.2 8.1 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4 8.3 8.1 8.3 8.2 8.3 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.656 8.56 8.55 8.44 8.67 8.55 8.66 8.66 8.65 8.66 8.77 7.88 8.77 7.88 8.77 7.88 8.77 8.65 8.66 8.66 8.66 8.66 8.66 8.66 8.66	MAY 8.5 8.4 8.4 8.3 8.3 8.1 8.2 8.5 8.4 8.5 8.4 8.7 8.7 8.7 8.8 7 8.8 7 8.8 8.5	8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.6 8.6 8.6 8.6 8.7 8.7 8.7 8.7 8.2 8.2 8.4 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	MAX ::	FEBRUARY	4EDIAN	 7.9 7.9 7.9 7.9 8.0 8.0 8.1 8.4 8.3 8.2 8.0 8.0 8.0	MARCH	 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 8.1 8.2 8.0 8.0 8.1 8.1 8.1	8.2 8.4 8.3 8.2 8.3 8.3 8.5 8.5 8.5 8.5 8.5 8.2 8.4 8.4 8.3 8.1 8.2 8.1 8.2 8.1 8.2	APRIL 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.4 8.3 8.1 8.3 8.2 8.3 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.65 8.55 8.44 8.68 8.78 8.68 8.65 8.65 8.65 8.66 8.77 7.88 7.99 7.88 7.99 7.88 7.88 7.88	MAY 8.5 8.4 8.4 8.3 8.3 8.1 8.2 8.4 8.5 8.4 8.5 8.7 8.7 8.7 8.8 7 8.8 7 8.8 7 8.8 8.5	8.5 8.5 8.5 8.5 8.4 8.3 8.2 8.4 8.5 8.6 8.6 8.6 8.6 8.6 8.7 8.2 8.2 8.4 7.9 7.8 7.8 7.8 7.8 7.8 7.8 7.8

06892450 OLATHE LAKE NEAR OLATHE, KS--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

	PII,	WAIEK,	WITCHE,	FIELD, SIE	MDAKD ON	IIIS, WAII	EK TEAK OC	TOBER ZU	UU IU SEI	FIEMBER 20	01	
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			JULY			AUGUST			SEPTEMBE	R
1	8.1	7.7	7.8	8.6	7.6	8.2	8.8	8.4	8.6	8.8	8.1	8.3
2	7.9 8.1	7.7 7.8	7.8 7.9	8.6 8.8 8.8 8.8	8.4	8.7	8.8	8.3	8.6	8.8 8.7 8.8 8.9	8.3	8.6 8.4
4	7.9	7.6	7.8	8.8	8.3	8.6	8.9	8.3	8.6	8.8	7.9	8.2
5	7.8	7.6	7.7	8.8	8.4	8.6	8.9	8.2	8.5	8.9	8.4	8.7
6	7.7	7.6	7.7	8.8	8.7 8.6	8.8	9.0	7.9	8.5	8.7	8.4	8.5
7 8	7.6 7.6	7.5 7.5	7.7 7.6 7.5 7.5 7.7	8.8 8.9 9.0 8.9 8.8	8.6 8.7	8.8 8.8 8.8 8.7	9.0 8.8 8.9 9.0 8.6	7.8	8.4 8.8	8.7 8.4 8.3 7.9 8.5	8.0	8.3
9	7.6	7.5	7.5	8.9	8.5 8.5	8.8	9.0	7.8	8.5	7.9	7.7	7.8
10	8.2		7.7	8.8				7.8				7.8
11	8.8 8.9	7.5 7.7 8.4	8.4 8.7 8.5 8.3 8.0	8.8 8.6 8.8 8.7	8.1	8.7 8.6 8.4 8.4	8.2 8.7 8.7 8.8 8.7	7.8	8.0	8.5 8.5 8.4 8.6 8.3	7.9	8.3
12 13	8.9 8.7	7.7 8.4	8.7	8.8	8.4	8.6 8.4	8.7 8.7	7.9 8.3	8.0 8.3 8.6 8.7 8.5	8.5 8.4	8.0 7.9	8.3 8.1 8.2
14	8.4	8.0 7.9	8.3	8.8	8.0	8.4	8.8	8.4	8.7	8.6	8.2	8.4
15						8.6						8.0
16	8.7	7.8 7.9	8.4 8.5 8.4 8.2 7.9	8.7 8.8 8.9 8.8	8.4 8.4	8.5 8.6 8.7 8.7	8.5 8.5 8.6 8.9 8.8	8.0	8.3	8.4 8.3 8.1 8.1	7.8	7.8
17 18	8.7 8.5	7.9 8.3	8.5 8.4	8.8 8.9	8.4 8.5	8.6 8.7	8.5 8.6	8.1 8.2	8.3 8.4	8.3 8.1	7.9 7.6	8.0 7.9
19	8.3	8.0	8.2	8.8	8.1	8.7	8.9	8.1	8.2	8.1	7.6	7.7
20	8.2	7.6	7.9									8.2
21	7.8	7.5	7.5	8.9 8.8 8.7 8.8 8.7	8.5	8.7	8.7 8.8 8.8 8.8	8.2	8.5	8.7 8.8 8.6 8.1 8.0	8.0	8.2
22 23	7.8 8.4	7.6 7.8	7.5 7.7 8.2 8.3 8.3	8.8 8.7	8.5	8.7 8.6	8.8	8.3	8.6 8.6	8.8 8.6	8.5 8.1	8.6 8.3
24	8.6	7.6 7.6	8.3	8.8	8.5	8.7	8.8	8.6	8.7	8.1	7.7	7.9
25												7.9
26	8.5	7.5	8.3 7.9 8.6 8.6 8.0	8.7 8.7 8.7 8.8 8.8	8.3 8.3 8.4 8.5	8.5 8.4 8.5 8.6 8.7	8.9 8.9 8.9 8.9 8.8	8.5	8.7	8.4 8.7 8.9 8.8 8.6	7.7	8.0
27 28	0.7	7.5 7.7	7.9 8.6	8.7 8.7	8.3	8.4 8.5	8.9 8.9	8.6 8.5	8.7 8.6	8.7 8.9	7.8	8.2 8.7
29	8.8	7.9 7.7	8.6	8.8	8.5	8.6	8.9	8.6	8.8	8.8	8.3	8.6
30 31	8.5	7.7	8.0	8.8 8.8	8.6 8.5	8.7 8.6	8.8 8.5	8.5 7.7	8.7 8.0	8.6	8.0	8.4
	0.0	0.4								0.0	0.5	0.5
MAX MIN	8.9 7.6	8.4 7.4	7.5	8.6	7.6	8.8	8.2	7.7	8.8	8.9 7.9	7.6	8.7 7.7
		TEMPI	ERATURE,	WATER (DE	G. C), W	ATER YEAR	R OCTOBER	2000 TO	SEPTEMBER	R 2001		
DAY	MAX	TEMPI MIN	ERATURE, MEAN	WATER (DE			R OCTOBER	2000 TO MIN		R 2001 MAX	MIN	MEAN
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN			
		MIN OCTOBER	MEAN R	MAX	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	JANUARY	7
1	19.4	MIN OCTOBER	MEAN	MAX 17.8	MIN NOVEMBER	MEAN	MAX	MIN DECEMBER	MEAN	MAX	JANUARY	
1 2 3	19.4 19.4 20.8	MIN OCTOBER	MEAN	MAX 17.8	MIN NOVEMBER 17.3 16.8	MEAN	MAX	MIN DECEMBER	MEAN	MAX	JANUARY	
1 2 3 4	19.4 19.4 20.8 20.4	MIN OCTOBER	MEAN	MAX 17.8	MIN NOVEMBER 17.3 16.8	MEAN	MAX	MIN DECEMBER	MEAN	MAX	JANUARY	
1 2 3 4 5	19.4 19.4 20.8 20.4 19.2	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6	MEAN 19.1 19.1 19.9 19.6 18.9	17.8 17.3 16.8 16.8	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8	17.5 17.0 16.5 16.4 16.0	5.4 5.4 5.3 5.2 4.8	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2	5.1 5.1 4.9 4.7 4.4	MAX	JANUARY	
1 2 3 4 5	19.4 19.4 20.8 20.4 19.2	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6	MEAN 19.1 19.1 19.9 19.6 18.9	17.8 17.3 16.8 16.8	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8	17.5 17.0 16.5 16.4 16.0	5.4 5.4 5.3 5.2 4.8	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2	5.1 5.1 4.9 4.7 4.4	MAX	JANUARY	
1 2 3 4 5	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6	MEAN 19.1 19.1 19.9 19.6 18.9	17.8 17.3 16.8 16.8	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8	17.5 17.0 16.5 16.4 16.0	5.4 5.4 5.3 5.2 4.8 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	MEAN 5.1 5.1 4.9 4.7 4.4 4.2 4.2	MAX	JANUARY	
1 2 3 4 5 6 7 8	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.4	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6	MEAN 19.1 19.1 19.9 19.6 18.9	17.8 17.3 16.8 16.8	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8	17.5 17.0 16.5 16.4 16.0	5.4 5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	5.1 5.1 4.9 4.7 4.4	MAX	JANUARY	
1 2 3 4 5 6 7 8 9	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.4	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 17.5 16.7 15.9 15.5	MEAN 19.1 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.7	MAX 17.8 17.3 16.8 16.8 16.3 15.8 15.2 14.3 13.5 12.5	MIN NOVEMBER 17.3 16.8 16.4 15.8 15.2 14.3 13.5 12.5 11.6	17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0	5.4 5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	5.1 5.1 4.9 4.7 4.4 4.2 4.2	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.4 16.3	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 17.5 16.7 15.9 15.5 15.3	MEAN 19.1 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.7	MAX 17.8 17.3 16.8 16.3 15.8 15.2 14.3 13.5 12.5	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 12.5 11.6	17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1	5.4 5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	5.1 5.1 4.9 4.7 4.4 4.2 4.2	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.4 16.3 15.7 16.0 15.8	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 17.5 16.7 15.9 15.5 15.3 15.1 15.1	MEAN 19.1 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.7 15.4 15.4 15.6	MAX 17.8 17.3 16.8 16.8 16.3 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 12.5 11.6	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0	5.4 5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	5.1 5.1 4.9 4.7 4.4 4.2 4.2	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.4 16.3 15.7 16.8 16.8	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 17.5 16.7 15.9 15.5 15.3 15.1 15.1 15.4 15.6	MEAN 19.1 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.7 15.4 15.6 15.8	MAX 17.8 17.3 16.8 16.8 16.3 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 12.5 11.6	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0 9.4	5.4 5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	5.1 5.1 4.9 4.7 4.4 4.2 4.2	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.6 16.3 15.8 16.3 16.6	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 17.5 16.7 15.9 15.5 15.3 15.1 15.1 15.4 15.6 15.7	MEAN 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.4 15.4 15.6 15.8 16.0	MAX 17.8 17.3 16.8 16.8 16.3 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0 9.4 9.0	5.4 5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	5.1 5.1 4.9 4.7 4.4 4.2 4.2 	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.4 16.3 15.7 16.8 16.3 16.6	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 17.5 16.7 15.9 15.5 15.3 15.1 15.4 15.6 15.7	MEAN 19.1 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.7 15.4 15.6 15.8 16.0	MAX 17.8 17.3 16.8 16.8 16.3 15.8 15.2 14.3 13.5 12.5 11.6 10.9 9.7 9.1 8.8	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0 9.4 9.0 8.5	5.4 5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	5.1 5.1 4.9 4.7 4.4 4.2 4.2 	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.0 15.8 16.3 16.6 16.0 16.2 18.0	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 17.5 16.7 15.9 15.3 15.1 15.4 15.6 15.7	MEAN 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.4 15.6 15.8 16.0 15.9 15.7 16.2	MAX 17.8 17.3 16.8 16.8 16.3 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0 9.4 9.0 8.5 7.9 7.4	5.4 5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	5.1 5.1 4.9 4.7 4.4 4.2 4.2 	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.4 16.3 15.7 16.8 16.3 16.6 16.0 16.2 18.0 18.2	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 17.5 16.7 15.9 15.5 15.3 15.1 15.1 15.4 15.6 15.7	MEAN 19.1 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.7 15.4 15.4 15.6 15.8 16.0	MAX 17.8 17.3 16.8 16.8 16.3 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0 9.4 9.0 8.5 7.9 7.4 7.1	5.4 5.4 5.3 5.2 4.8 4.6 4.6 	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	MEAN 5.1 5.1 4.9 4.7 4.4 4.2 4.2	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.3 15.7 16.0 15.8 16.3 16.6 16.0 18.2 17.7	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 17.5 16.7 15.9 15.5 15.3 15.1 15.4 15.6 15.7 15.8 15.5 15.5 15.6 16.3 16.4	MEAN 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.4 15.6 15.8 16.0 15.9 15.7 16.2 17.0	MAX 17.8 17.3 16.8 16.8 16.3 15.8 15.2 14.3 13.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9 6.5	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0 9.4 9.0 8.5 7.9 7.4 7.1 6.7	5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	5.1 5.1 4.9 4.7 4.4 4.2 4.2 	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.4 16.3 15.7 16.6 16.3 16.6 16.0 16.2 18.0 18.2 17.7	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 17.5 16.7 15.9 15.5 15.3 15.1 15.4 15.6 15.7 15.8 15.5 16.3 16.4 16.6	MEAN 19.1 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.7 15.4 15.6 15.8 16.0 15.9 15.7 16.2 17.0 17.1	MAX 17.8 17.3 16.8 16.8 16.3 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.9 9.7 9.1 8.8 8.2 2 7.5 7.2 6.9	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9 6.5	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0 9.4 9.0 8.5 7.9 7.4 7.1 6.7	5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	MEAN 5.1 5.1 4.9 4.7 4.4 4.2 4.2	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.4 16.3 15.7 16.0 15.8 16.6 16.0 18.2 17.7 17.7 17.7 17.7	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 17.5 16.7 15.9 15.5 15.3 15.1 15.4 15.5 15.7 15.8 15.5 16.3 16.4 16.6 16.3 16.4	MEAN 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.4 15.6 15.8 16.0 15.9 15.7 16.2 17.0 17.1 16.7 16.7	MAX 17.8 17.3 16.8 16.8 16.3 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9 6.5 6.4 6.7	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9 6.5 6.1 5.9	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0 9.4 9.0 8.5 7.9 7.4 7.1 6.7 6.3 6.3 6.1 6.0	5.4 5.4 5.3 5.2 4.8 4.6 4.6 	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	5.1 5.1 4.9 4.7 4.4 4.2 4.2 	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.4 16.3 15.7 16.6 16.3 16.6 16.0 16.2 18.0 18.2 17.7	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 17.5 16.7 15.9 15.5 15.3 15.1 15.1 15.4 15.6 15.7 15.8 15.5 16.3 16.4 16.6 16.5 17.0	MEAN 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.7 15.4 15.4 15.6 15.8 16.0 15.9 15.7 17.1 16.2 17.0 17.1	MAX 17.8 17.3 16.8 16.8 16.3 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 2 7.5 7.2 6.9 6.5 6.4 6.7 6.4	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9 6.5 6.1 5.9 5.7	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0 9.4 9.0 8.5 7.9 7.4 7.1 6.7 6.3 6.1 6.0 6.0	5.4 5.4 5.3 5.2 4.8 4.6 4.6 	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	MEAN 5.1 5.1 4.9 4.7 4.4 4.2 4.2	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.6 15.8 16.6 16.2 18.0 18.2 17.7 17.7 17.3 17.3 18.0 17.8	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 17.5 16.7 15.9 15.5 15.3 15.1 15.4 15.6 16.7 15.8 15.6 16.3 16.4 16.6 16.5 17.0 17.4	MEAN 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.4 15.6 15.8 16.0 15.9 16.2 17.2 17.0 17.6 17.6	MAX 17.8 17.3 16.8 16.3 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9 6.5 6.4 6.7 6.4 5.8	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9 6.5 6.1 5.7 5.6	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0 9.4 9.0 8.5 7.4 7.1 6.7 6.3 6.1 6.0 6.0 5.7	5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	5.1 5.1 4.9 4.7 4.4 4.2 4.2 	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.4 16.3 15.7 16.6 16.3 16.6 16.0 16.2 18.0 18.2 17.7 17.7 17.7 17.3 17.3 18.0 17.8	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 16.7 15.9 15.5 15.3 15.1 15.4 15.6 16.7 15.8 15.6 16.3 16.4 16.6 16.5 17.0 17.4 17.2	MEAN 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.4 15.4 15.6 15.8 16.0 15.9 17.1 16.2 17.0 17.1 16.7 17.6 17.6 17.6	MAX 17.8 17.3 16.8 16.8 16.3 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 2.7.5 7.2 6.9 6.5 6.4 6.7 6.4 5.8	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9 6.5 6.1 5.9 5.7 5.6	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0 9.4 9.0 8.5 7.9 7.4 7.1 6.7 6.3 6.1 6.0 6.0 5.7	5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	MEAN 5.1 5.1 4.9 4.7 4.4 4.2 4.2	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.4 16.3 15.7 16.0 15.8 16.6 16.2 18.0 17.7 17.7 17.7 17.7 17.3 17.3 18.0 17.5 18.0 17.5 17.5 17.5 17.5 17.5 17.5 17.5 17.5	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 16.7 15.9 15.5 15.3 15.1 15.4 15.6 16.7 15.9 15.5 17.0 17.4 17.2 17.2 17.3	MEAN 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.7 15.4 15.6 15.8 16.0 17.6 17.6 17.6 17.6 17.6 17.6 17.6	MAX 17.8 17.3 16.8 16.8 16.3 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9 6.5 6.4 6.7 6.4 5.8 5.7 5.6 5.6	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9 6.5 6.1 5.9 5.7 5.6 5.4 5.3	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0 9.4 9.0 8.5 7.4 7.1 6.7 6.3 6.1 6.0 6.0 5.7	5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	5.1 5.1 4.9 4.7 4.4 4.2 4.2	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.4 16.3 15.7 16.6 16.3 16.6 16.0 16.2 18.0 17.7 17.7 17.7 17.3 17.3 18.0 17.8	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 17.5 16.7 15.9 15.5 15.3 15.1 15.4 15.6 16.7 15.8 15.6 16.3 16.4 16.6 16.5 17.0 17.4 17.2 17.2 17.3 16.9	MEAN 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.6 15.8 16.0 15.9 15.7 16.2 17.0 17.1 16.7 17.6 17.6 17.6 17.6 17.6 17.7	MAX 17.8 17.3 16.8 16.8 16.3 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 2.5 7.2 6.9 6.5 6.4 6.7 6.4 5.8 5.7	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9 6.5 6.1 5.9 5.7 5.6 5.4 5.4 5.4	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0 9.4 9.0 8.5 7.9 7.4 7.1 6.7 6.3 6.1 6.0 6.0 5.7	5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	MEAN 5.1 5.1 4.9 4.7 4.4 4.2 4.2	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.7 16.4 16.3 15.7 16.0 15.8 16.6 16.2 18.0 17.7 17.7 17.7 17.7 17.3 17.3 18.0 17.5 18.0 17.5 17.5 17.5 17.5 17.5 17.5 17.5 17.5	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 16.7 15.9 15.5 15.3 15.1 15.4 15.6 16.7 15.9 15.5 17.0 17.4 17.2 17.2 17.3	MEAN 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.7 15.4 15.6 15.8 16.0 17.6 17.6 17.6 17.6 17.6 17.6 17.6	MAX 17.8 17.3 16.8 16.8 16.3 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9 6.5 6.4 6.7 6.4 5.8 5.7 5.6 5.6	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9 6.5 6.1 5.9 5.7 5.6 5.4 5.3	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0 9.4 9.0 8.5 7.4 7.1 6.7 6.3 6.1 6.0 6.0 5.7	5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	5.1 5.1 4.9 4.7 4.4 4.2 4.2	MAX	JANUARY	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	19.4 19.4 20.8 20.4 19.2 18.6 17.5 16.4 16.3 15.7 16.6 16.3 16.6 16.2 18.0 17.7 17.7 17.3 17.3 17.3 17.3 17.3 17.3	MIN OCTOBER 18.8 18.9 19.1 19.2 18.6 17.5 16.7 15.5 15.3 15.1 15.4 15.6 16.7 15.6 16.7 17.2 17.3 16.9 16.8	MEAN 19.1 19.9 19.6 18.9 18.1 17.1 16.3 15.9 15.7 15.4 15.6 15.8 16.0 15.9 15.7 16.2 17.2 17.0 17.1 16.7 17.6 17.6 17.6 17.6 17.6 17.6	MAX 17.8 17.3 16.8 16.8 16.3 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9 6.5 6.4 6.7 6.4 6.7 6.4 6.7 6.4 6.7 6.5 5.6 5.6 5.6 5.6	MIN NOVEMBER 17.3 16.8 16.4 16.0 15.8 15.2 14.3 13.5 12.5 11.6 10.9 10.4 9.7 9.1 8.8 8.2 7.5 7.2 6.9 6.5 6.1 5.9 5.7 5.7 5.7 5.6 5.4 5.3 5.4 5.3	MEAN 17.5 17.0 16.5 16.4 16.0 15.6 14.7 13.9 13.0 12.1 11.2 10.7 10.0 9.4 9.0 8.5 7.9 7.4 7.1 6.7 6.3 6.1 6.0 5.7	5.4 5.4 5.3 5.2 4.8 4.6 4.6	MIN DECEMBER 5.0 4.8 4.6 4.3 4.2 4.0 3.9	5.1 5.1 4.9 4.7 4.4 4.2 4.2	MAX	JANUARY	

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TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5		 	 	 		 	9.0 9.6 9.5 9.8 11.3	8.8 8.7 9.3 9.2 9.7	8.9 9.1 9.4 9.5 10.3	20.8 20.8 20.9 22.1 21.8	19.7 20.0 20.5 20.4 20.9	20.2 20.4 20.6 21.2 21.2
6 7 8 9 10	 	 	 	 	 	 	12.2 12.9 13.8 15.0 16.5	11.2 11.4 12.6 13.4 14.7	11.7 12.1 13.1 13.8 15.8	20.9 20.7 21.4 22.1 22.2	20.6 19.9 20.1 20.6 21.3	20.7 20.3 20.7 21.2 21.7
11 12 13 14 15		 	 	 5.8 6.6 6.7	 5.3 5.8 6.5	 5.6 6.2 6.6	16.5 14.9 16.1 16.8 16.4	14.9 14.3 14.5 15.3 15.6	15.7 14.5 15.1 15.9 15.9	22.0 23.9 23.2 23.8 24.1	21.4 21.3 21.8 22.5 23.0	21.6 22.3 22.6 23.2 23.6
16 17 18 19 20		 		6.5 7.2 7.4 7.2 8.6	6.4 6.3 6.2 6.6 6.6	6.4 6.5 6.7 6.9 7.0	16.0 14.9 15.3 15.0 15.9	14.9 14.3 14.1 14.4 14.7	15.4 14.5 14.6 14.7 15.2	26.2 26.8 24.5 24.2 25.4	23.5 24.1 23.7 23.7 23.9	24.5 25.3 24.0 23.9 24.5
21 22 23 24 25		 	 	9.9 9.8 10.4 8.1 8.0	7.0 8.5 7.1 7.1 7.7	8.5 9.2 8.8 7.7 7.8	17.0 17.0 16.5 19.0 18.0	15.5 16.5 16.1 16.0 16.1	16.1 16.7 16.3 16.8 16.9	24.1 22.2 21.4 20.7 20.0	22.2 21.4 20.7 20.0 19.5	22.8 21.8 21.0 20.3 19.7
26 27 28 29 30 31	 	 	 	8.2 9.2 8.9 10.3 10.6 10.5	7.5 7.5 8.2 8.1 8.1 7.9	7.6 8.3 8.4 8.4 9.3 9.1	20.0 21.3 21.5 21.3 20.9	17.5 18.2 19.4 20.0 20.0	18.4 19.6 20.6 20.8 20.4	19.9 21.5 23.2 23.2 22.1 20.8	19.4 19.5 19.9 22.1 20.8 19.6	19.6 19.9 21.2 22.6 21.5 19.9
MONTH				10.6	5.3	7.6	21.5	8.7	14.9	26.8	19.4	21.7
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN		MIN AUGUST	MEAN	MAX	MIN SEPTEMBE	
DAY 1 2 3 4 5	MAX 21.4 20.1 20.5 19.2 19.1		MEAN 19.8 19.4 19.9 18.7 18.2	28.1 29.5 29.7 29.6 30.2		MEAN 26.6 28.5 28.9 28.2 28.6			30.9 31.4 31.5 31.3	27.4 28.1 27.2 27.2 28.1		
1 2 3 4	21.4 20.1 20.5 19.2	JUNE 19.2 19.0 19.2 17.4	19.8 19.4 19.9 18.7	28.1 29.5 29.7 29.6	JULY 25.8 27.6 28.1 27.2	26.6 28.5 28.9 28.2	31.8 32.5 32.0 32.7	30.3 30.5 30.9 30.8	30.9 31.4 31.5 31.3	27.4 28.1 27.2 27.2	25.9 26.1 26.3 26.2	26.4 26.8 26.7 26.5
1 2 3 4 5 6 7 8 9	21.4 20.1 20.5 19.2 19.1 19.5 19.2 19.2 22.0	JUNE 19.2 19.0 19.2 17.4 16.8 16.8 17.6 17.8 18.0	19.8 19.4 19.9 18.7 18.2 18.1 18.0 18.4 18.7	28.1 29.5 29.7 29.6 30.2 30.1 30.8 31.3 30.3	JULY 25.8 27.6 28.1 27.2 27.6 28.7 28.9 29.2 29.3	26.6 28.5 28.9 28.2 28.6 29.5 29.8 30.2 29.8	31.8 32.5 32.0 32.7 33.7 33.2 32.1 32.8 32.7	30.3 30.5 30.9 30.8 30.9 30.8 31.1 30.3	30.9 31.4 31.5 31.3 31.9 32.0 31.2 31.9 31.3	27.4 28.1 27.2 27.2 28.1 27.5 26.7 26.0 25.3	25.9 26.1 26.3 26.2 26.6 26.7 26.0 25.3 24.6	26.4 26.8 26.7 26.5 27.3 27.1 26.3 25.6 24.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14	21.4 20.1 20.5 19.2 19.1 19.5 19.2 22.0 25.1 27.0 26.6 24.4	JUNE 19.2 19.0 19.2 17.4 16.8 17.6 17.8 18.0 18.2 21.1 22.3 24.4 23.4	19.8 19.4 19.9 18.7 18.2 18.1 18.0 18.4 18.7 21.4 24.3 25.4 24.3 25.4 23.9	28.1 29.5 29.7 29.6 30.2 30.1 30.8 31.3 30.3 30.7 31.5 30.8 29.1	JULY 25.8 27.6 28.1 27.2 27.6 28.7 28.9 29.3 27.9 28.9 28.3 27.6 27.6 27.6	26.6 28.5 28.9 28.2 28.6 29.5 29.8 30.2 29.8 29.7 30.1 29.4 28.2 28.2	31.8 32.5 32.0 32.7 33.7 33.2 32.1 32.8 32.7 30.4 29.4 28.9 29.0 29.7	30.3 30.5 30.9 30.8 30.8 30.8 30.8 30.8 30.8 20.4 28.8 28.4 28.6 28.2	30.9 31.4 31.5 31.3 31.9 32.0 31.2 31.9 31.3 30.0 29.1 28.7 28.8 28.8	27.4 28.1 27.2 27.2 28.1 27.5 26.7 26.0 25.3 25.8 25.1 24.5 24.7 25.0	25.9 26.1 26.3 26.2 26.6 26.7 26.0 25.3 24.6 24.2 24.1 24.0 23.7	26.4 26.8 26.7 26.5 27.3 27.1 26.3 25.6 24.9 24.6 24.2 24.2 24.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	21.4 20.1 20.5 19.2 19.1 19.5 19.2 22.0 25.1 27.0 26.9 25.6 24.4 25.5 26.9 26.4 25.4.8	JUNE 19.2 17.4 16.8 16.8 17.6 17.8 18.0 18.2 21.1 22.3 24.4 22.8 23.0 23.9 24.7 23.8	19.8 19.4 19.9 18.7 18.2 18.1 18.0 18.4 12.4 24.3 25.4 23.9 23.5 24.8 25.4 25.0 24.3	28.1 29.5 29.7 29.6 30.2 30.1 30.8 31.3 30.7 31.5 30.8 29.1 29.0 28.2 28.4 30.2 31.1 30.7	JULY 25.8 27.6 28.1 27.2 27.6 28.7 28.9 29.3 27.9 28.9 28.3 27.6 27.6 27.6 27.4 27.0 27.4 28.6 27.7	26.6 28.5 28.9 28.2 28.6 29.5 29.8 30.2 29.8 29.7 30.1 29.4 28.2 27.9 27.6 28.4 29.7	31.8 32.5 32.0 32.7 33.7 33.2 32.1 32.8 32.7 30.4 29.4 28.9 29.0 29.7 28.8	30.3 30.5 30.9 30.8 30.8 30.8 30.8 30.8 30.8 20.4 28.8 28.4 28.6 28.2 27.1	30.9 31.4 31.5 31.3 31.9 32.0 31.2 31.9 31.3 30.0 29.1 28.7 28.8 27.8 26.9 26.6 26.4 26.2	27.4 28.1 27.2 27.2 28.1 27.5 26.7 26.0 25.3 25.8 25.1 24.5 24.7 25.0 23.7	SEPTEMBE 25.9 26.1 26.3 26.2 26.6 26.7 26.0 25.3 24.6 24.2 24.1 24.0 23.7 22.9 22.5 22.6 22.0 21.6	26. 4 26. 8 26. 7 26. 5 27. 3 27. 1 26. 3 25. 6 24. 9 24. 6 24. 2 24. 2 24. 2 24. 2 24. 2 23. 2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	21.4 20.1 20.5 19.2 19.1 19.5 19.2 22.0 25.1 27.0 26.9 25.6 24.4 25.5 26.9 26.4 25.3 23.8 23.2 23.5 25.7	JUNE 19.2 19.0 19.2 17.4 16.8 16.8 17.6 17.8 18.0 18.2 21.1 22.3 24.4 22.8 23.0 23.9 24.7 23.8 21.5	19.8 19.4 19.9 18.7 18.2 18.1 18.0 18.4 12.4 24.3 25.4 22.3 25.5 24.8 25.4 22.7 21.6 22.8 24.3 22.7	28.1 29.5 29.7 29.6 30.2 30.1 30.8 31.3 30.3 30.7 31.5 30.8 29.1 29.0 28.2 28.4 30.2 31.1 30.7 31.9	JULY 25.8 27.6 28.1 27.2 27.6 28.9 29.3 27.9 28.9 28.3 27.6 27.6 27.6 27.4 27.0 27.4 28.6 27.7 29.7 30.4 30.7 31.0 30.9	26.6 28.5 28.9 28.2 28.6 29.5 29.8 30.2 29.8 29.7 30.1 29.4 28.2 27.9 27.6 28.4 29.7 29.6 30.8 31.6 31.6 31.8	31.8 32.5 32.0 32.7 33.7 33.2 32.1 32.8 32.7 30.4 29.4 28.9 29.0 29.7 28.8 27.2 27.0 26.6 627.3 27.2 27.2 27.0 28.1 27.8	30.3 30.5 30.9 30.8 30.9 30.8 31.1 30.3 29.4 28.8 28.4 28.6 28.2 27.1 26.6 26.5 26.2 25.7 26.0 25.9 26.3 26.0 26.2	30.9 31.4 31.5 31.3 31.9 32.0 31.2 31.9 31.3 30.0 29.1 28.7 28.8 27.8 26.9 26.6 26.4 26.2 26.6	27.4 28.1 27.2 27.2 28.1 27.5 26.7 26.0 25.3 25.8 25.1 24.5 24.7 25.0 23.7 23.8 23.4 22.6 22.1 22.6	SEPTEMBE 25.9 26.1 26.3 26.2 26.6 26.7 25.3 24.6 24.2 24.1 24.0 23.7 22.9 22.5 22.6 21.8 21.9 22.1 21.5 20.7	26. 4 26. 8 26. 7 26. 5 27. 3 27. 1 26. 3 25. 6 24. 9 24. 6 24. 6 24. 2 24. 2 24. 2 23. 2 23. 1 22. 8 22. 1 22. 1 22. 2 22. 6 22. 0 21. 1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	21.4 20.1 20.5 19.2 19.1 19.5 19.2 22.0 25.1 27.0 26.9 24.4 25.5 26.4 25.5 24.8 23.8 23.5 27.4 27.7 29.4 27.7 29.4 27.8 29.7 28.6 27.1	JUNE 19.2 19.0 19.2 17.4 16.8 17.6 17.8 18.0 18.2 21.1 22.3 24.4 22.8 23.0 23.9 24.7 23.8 21.5 20.9 22.2 23.3 23.9 24.5 24.9 25.1 26.0 25.8	19.8 19.9 18.7 18.2 18.1 18.0 18.4 18.7 21.4 24.3 25.4 24.8 23.9 23.5 24.8 25.4 25.4 25.4 25.4 25.4 25.5 26.0 26.5 27.5 27.5 27.5 26.4	28.1 29.5 29.7 29.6 30.2 30.1 30.8 31.3 30.3 30.7 31.5 30.8 29.1 29.0 28.2 28.4 30.2 31.1 30.7 31.9 32.3 32.6 32.2 32.7 32.0	JULY 25.8 27.6 28.7 28.9 29.2 29.3 27.6 28.9 28.9 28.9 28.3 27.6 27.4 27.6 27.4 28.6 27.7 29.7 30.4 30.7 31.0 30.9 30.4 29.2 28.6 28.3 28.6 28.3 28.6	26.6 28.5 28.9 28.2 28.6 29.5 29.8 30.2 29.8 29.7 30.1 29.4 28.2 27.9 27.6 28.4 29.7 29.6 30.8 31.6 31.4 31.8 30.9	31.8 32.5 32.0 32.7 33.7 33.2 32.1 32.8 32.7 30.4 29.9 29.0 29.7 28.8 27.2 27.0 26.6 27.3 27.2 27.2 27.1 27.3 28.9 28.9 28.9	AUGUST 30.3 30.5 30.9 30.8 30.8 30.1 30.3 29.4 28.8 28.4 28.6 26.5 26.5 26.2 27.1 26.6 26.5 26.7 26.0 25.9 26.3 26.0 26.2 26.0 26.2 26.7 28.1 27.2	30.9 31.4 31.5 31.3 31.9 32.0 31.2 31.3 30.0 29.1 28.7 28.8 27.8 26.9 26.6 26.4 26.2 26.6 26.7 26.7 26.3 27.5 29.1 28.7	27.4 28.1 27.2 27.2 28.1 27.5 26.7 25.3 25.8 25.1 24.5 24.7 23.4 22.6 23.2 22.1 22.6 23.2 22.5 21.5 20.9	SEPTEMBE 25.9 26.1 26.3 26.2 26.6 26.7 26.0 25.3 24.6 24.2 24.1 24.0 23.7 22.9 22.5 22.6 22.0 21.6 21.8 21.9 22.1 21.5 20.7 20.3 20.1 20.2 20.3 20.1	26. 4 26. 8 26. 7 26. 5 27. 3 27. 1 26. 3 25. 6 24. 9 24. 6 24. 2 24. 2 25. 6 26. 5 26. 5 27. 3 27. 1 26. 3 27. 1 26. 3 27. 1 27. 1 28. 2 29. 2 29. 2 29. 2 29. 2 20. 5 20. 6 20. 0 20. 6 20. 0 20. 6 20. 0 20. 6 20. 6 20

06892450 OLATHE LAKE NEAR OLATHE, KS--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		0211	JEIV DIDE	OLVED (FIG).			JIOBER ZUUC		I DI I DI I C	001		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		N	OVEMBER		DE	CEMBER			JANUARY	
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MONTH												
DAV	MAV	MIN	MEAN	MAY	MIN	MEAN	MAY	MIN	MEAN	MAY	MIN	MEAN
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN		MIN APRIL	MEAN	MAX	MIN MAY	MEAN
			MEAN	MAX		MEAN		APRIL			MAY	
1 2		FEBRUARY			MARCH		11.2 12.3	APRIL 10.2 10.1	10.9 11.2	9.9 9.3	MAY 9.0 8.4	9.4 8.8
1 2 3		FEBRUARY	 	 	MARCH		11.2 12.3 11.4	APRIL 10.2 10.1 10.8	10.9 11.2 11.0	9.9 9.3 9.6	MAY 9.0 8.4 8.1	9.4 8.8 8.6
1 2 3 4	 	FEBRUARY			MARCH	 	11.2 12.3 11.4 11.1	APRIL 10.2 10.1 10.8 10.4	10.9 11.2 11.0 10.8	9.9 9.3 9.6 9.2	MAY 9.0 8.4 8.1 7.8	9.4 8.8 8.6 8.5
1 2 3 4 5		FEBRUARY	 	 	MARCH	 	11.2 12.3 11.4 11.1	10.2 10.1 10.8 10.4 10.4	10.9 11.2 11.0 10.8 10.7	9.9 9.3 9.6 9.2 8.5	MAY 9.0 8.4 8.1 7.8 7.5	9.4 8.8 8.6 8.5 7.8
1 2 3 4 5		FEBRUARY	 	 	MARCH	 	11.2 12.3 11.4 11.1 11.2	APRIL 10.2 10.1 10.8 10.4 10.4	10.9 11.2 11.0 10.8 10.7	9.9 9.3 9.6 9.2 8.5	MAY 9.0 8.4 8.1 7.8 7.5	9.4 8.8 8.6 8.5 7.8
1 2 3 4 5		FEBRUARY	 	 	MARCH	 	11.2 12.3 11.4 11.1 11.2 11.0 10.6	APRIL 10.2 10.1 10.8 10.4 10.3 9.8	10.9 11.2 11.0 10.8 10.7	9.9 9.3 9.6 9.2 8.5 7.9 7.6	MAY 9.0 8.4 8.1 7.8 7.5 7.1 6.2	9.4 8.8 8.6 8.5 7.8 7.4 7.0
1 2 3 4 5 6 7 8 9		FEBRUARY		 	MARCH	 	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7	APRIL 10.2 10.1 10.8 10.4 10.3 9.8 9.9 9.5	10.9 11.2 11.0 10.8 10.7 10.7 10.2 10.2	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6	9.0 8.4 8.1 7.8 7.5 7.1 6.2 7.1 8.1	9.4 8.8 8.6 8.5 7.8 7.4 7.0 8.0 8.8
1 2 3 4 5		FEBRUARY		 	MARCH		11.2 12.3 11.4 11.1 11.2 11.0 10.6	APRIL 10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.9	10.9 11.2 11.0 10.8 10.7	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0	MAY 9.0 8.4 8.1 7.8 7.5 7.1 6.2 7.1	9.4 8.8 8.6 8.5 7.8 7.4 7.0 8.0
1 2 3 4 5 6 7 8 9		FEBRUARY		======================================	MARCH	 	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7	APRIL 10.2 10.1 10.8 10.4 10.3 9.8 9.9 9.5	10.9 11.2 11.0 10.8 10.7 10.7 10.2 10.2	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6	9.0 8.4 8.1 7.8 7.5 7.1 6.2 7.1 8.1	9.4 8.8 8.6 8.5 7.8 7.4 7.0 8.0 8.8
1 2 3 4 5 6 7 8 9 10		FEBRUARY			MARCH		11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9	10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.9 9.5 10.6	10.9 11.2 11.0 10.8 10.7 10.2 10.2 10.0 11.1	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6 9.0	MAY 9.0 8.4 8.1 7.8 7.5 7.1 6.2 7.1 8.0 6.9 7.1	9.4 8.8 8.6 8.5 7.8 7.4 7.0 8.8 8.3
1 2 3 4 5 6 7 8 9 10		FEBRUARY		 10.1	MARCH	 9,9	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6	10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.9 9.5 10.6	10.9 11.2 11.0 10.8 10.7 10.2 10.2 10.0 11.1 10.0 9.0 9.7	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6 9.0	MAY 9.0 8.4 8.1 7.8 7.5 7.1 6.2 7.1 8.1 8.0 6.9 7.1 7.0	9.4 8.8 8.6 7.8 7.4 7.0 8.0 8.8 7.4 7.5
1 2 3 4 5 6 7 8 9 10		FEBRUARY			MARCH		11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9	10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.9 9.5 10.6	10.9 11.2 11.0 10.8 10.7 10.2 10.2 10.0 11.1	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6 9.0	MAY 9.0 8.4 8.1 7.8 7.5 7.1 6.2 7.1 8.0 6.9 7.1	9.4 8.8 8.6 8.5 7.8 7.4 7.0 8.8 8.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		FEBRUARY		 10.1 10.5	MARCH	 9.9 10.1	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6 10.8 9.9	10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.9 5 10.6 9.2 8.7 9.1 9.5 9.2	10.9 11.2 11.0 10.8 10.7 10.2 10.2 10.0 11.1 10.0 9.7 10.0 9.7	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6 9.0 8.0 7.7 7.8 8.3 8.1	MAY 9.0 8.4 8.1 7.8 7.5 7.1 6.2 7.1 8.0 6.9 7.1 7.0 7.2 7.4	9.4 8.8 8.6 7.8 7.4 7.0 8.0 8.8 8.3 7.4 7.5 7.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		FEBRUARY		 10.1 10.5 10.5	MARCH	 9.9 10.1 10.1	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6 10.8 9.9	APRIL 10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.5 10.6 9.2 8.7 9.1 9.5 9.2 9.0	10.9 11.2 11.0 10.8 10.7 10.7 10.2 10.0 11.1 10.0 9.0 9.7 10.0 9.5	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6 9.0 7.7 7.8 8.3 8.1	MAY 9.0 8.4 8.1 7.8 7.5 7.1 6.2 7.1 8.0 6.9 7.1 7.0 7.2 7.4 7.3	9.4 8.8 8.6 8.5 7.8 7.4 7.0 8.8 8.3 7.4 7.5 7.7 7.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		FEBRUARY		 10.1 10.5 10.0 10.2	MARCH 9.3 9.3 9.3 9.9 9.8 9.4 9.6	 9.9 10.1 10.1 9.9 9.9	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6 10.8 9.9 9.8 9.0 9.3	10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.5 10.6 9.2 8.7 9.1 9.5 9.2 8.7 9.1 9.5 9.2	10.9 11.2 11.0 10.8 10.7 10.2 10.2 10.0 11.1 10.0 9.7 10.0 9.5 9.3 8.7 8.7	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6 9.0 8.0 7.7 7.8 8.3 8.1	MAY 9.0 8.4 8.1 7.8 7.5 7.1 6.2 7.1 8.0 6.9 7.1 7.0 7.2 7.4 7.3 7.0 5.5	9.4 8.8 8.6 7.8 7.4 7.0 8.0 8.3 7.4 7.5 7.7 7.8 8.1 8.1 6.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18		FEBRUARY		 10.1 10.5 10.5 10.0 10.2 10.2	MARCH 9.3 9.3 9.9 9.8 9.4 9.6 9.3	 9.9 10.1 10.1 9.9 9.9 10.0	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6 10.8 9.9 9.8 9.0 9.3 9.0	APRIL 10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.5 10.6 9.2 8.7 9.1 9.5 9.2 8.4 8.2 8.5	10.9 11.2 11.0 10.8 10.7 10.7 10.2 10.0 11.1 10.0 9.7 10.0 9.5 9.5 9.3 8.7 8.7	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6 9.0 7.7 7.8 8.3 8.1	MAY 9.0 8.4 7.8 7.5 7.1 6.2 7.1 8.0 6.9 7.1 7.0 7.2 7.4 7.3 7.0 5.5 6.2	9.4 8.8 8.6 8.5 7.8 7.4 7.0 8.8 8.3 7.4 7.5 7.7 7.8 8.1 8.1 6.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		FEBRUARY		 10.1 10.5 10.0 10.2	MARCH 9.3 9.3 9.3 9.9 9.8 9.4 9.6	 9.9 10.1 10.1 9.9 9.9	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6 10.8 9.9 9.8 9.0 9.3	10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.5 10.6 9.2 8.7 9.1 9.5 9.2 8.7 9.1 9.5 9.2	10.9 11.2 11.0 10.8 10.7 10.2 10.2 10.0 11.1 10.0 9.7 10.0 9.5 9.3 8.7 8.7	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6 9.0 8.0 7.7 7.8 8.3 8.1	MAY 9.0 8.4 8.1 7.8 7.5 7.1 6.2 7.1 8.0 6.9 7.1 7.0 7.2 7.4 7.3 7.0 5.5	9.4 8.8 8.6 7.8 7.4 7.0 8.0 8.3 7.4 7.5 7.7 7.8 8.1 8.1 6.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20		FEBRUARY		 10.1 10.5 10.5 10.0 10.2 10.2 10.1 11.4	MARCH 9.3 9.3 9.9 9.8 9.4 9.6 9.3 9.5	 9.9 10.1 10.1 9.9 9.9 10.0 9.8 10.0	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6 10.8 9.9 9.8 9.0 9.3 9.0 9.2	APRIL 10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.5 10.6 9.2 8.7 9.1 9.5 9.2 8.4 8.2 8.5 8.4 7.9	10.9 11.2 11.0 10.8 10.7 10.7 10.2 10.0 11.1 10.0 9.7 10.0 9.5 9.5 9.3 8.7 8.7 8.6 8.6	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6 9.0 7.7 7.8 8.3 8.1 9.1 7.8 8.9	MAY 9.0 8.4 7.8 7.5 7.1 6.2 7.1 8.0 6.9 7.1 7.0 7.2 7.4 7.3 7.0 5.5 6.2 6.0 4.1	9.4 8.8 8.6 8.5 7.8 7.4 7.0 8.8 8.3 7.4 7.5 7.7 7.8 8.1 8.1 6.7 7.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22		FEBRUARY		 10.1 10.5 10.5 10.0 10.2 10.2 10.2 10.1 11.4	MARCH 9.3 9.3 9.9 9.8 9.4 9.6 9.3 9.5 10.7	 9.9 10.1 10.1 9.9 9.9 10.0 9.8 10.0	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6 10.8 9.9 9.3 9.0 9.3 9.0 9.2	APRIL 10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.9 9.5 10.6 9.2 8.7 9.1 9.5 9.2 9.0 8.4 8.2 8.5 8.4 7.9 8.0	10.9 11.2 11.0 10.8 10.7 10.7 10.2 10.0 11.1 10.0 9.7 10.0 9.5 9.3 8.7 8.7 8.6 8.6 8.5	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.0 9.7 7.8 8.3 8.1 9.1 7.8 8.9	MAY 9.0 8.4 8.1 7.8 7.5 7.1 6.2 7.1 8.0 6.9 7.1 7.0 7.2 7.4 7.3 7.0 5.5 6.2 6.0 4.1 4.3	9.4 8.8 8.6 8.5 7.8 7.4 7.0 8.8 8.3 7.5 7.5 7.7 7.8 8.1 6.3 7.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20		FEBRUARY		 10.1 10.5 10.5 10.0 10.2 10.2 10.1 11.4	MARCH 9.3 9.3 9.9 9.8 9.4 9.6 9.3 9.5	 9.9 10.1 10.1 9.9 9.9 10.0 9.8 10.0	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6 10.8 9.9 9.8 9.0 9.3 9.0 9.2	APRIL 10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.5 10.6 9.2 8.7 9.1 9.5 9.2 8.4 8.2 8.5 8.4 7.9	10.9 11.2 11.0 10.8 10.7 10.7 10.2 10.0 11.1 10.0 9.7 10.0 9.5 9.5 9.3 8.7 8.7 8.6 8.6	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6 9.0 7.7 7.8 8.3 8.1 9.1 7.8 8.9	MAY 9.0 8.4 7.8 7.5 7.1 6.2 7.1 8.0 6.9 7.1 7.0 7.2 7.4 7.3 7.0 5.5 6.2 6.0 4.1	9.4 8.8 8.6 8.5 7.8 7.4 7.0 8.8 8.3 7.4 7.5 7.7 7.8 8.1 6.7 7.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23		FEBRUARY		 10.1 10.5 10.5 10.0 10.2 10.2 10.1 11.4	MARCH 9.3 9.3 9.9 9.8 9.4 9.6 9.3 9.5 10.7 9.1	 9.9 10.1 10.1 10.1 9.9 9.9 10.0 9.8 10.0	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6 10.8 9.9 9.8 9.0 9.3 9.0 9.2	APRIL 10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.9 9.5 10.6 9.2 8.7 9.1 9.5 9.2 8.7 9.1 9.5 8.4 8.2 8.5 8.4 7.9 8.0 7.5	10.9 11.2 11.0 10.8 10.7 10.2 10.2 10.0 11.1 10.0 9.7 10.0 9.7 10.0 9.7 10.0 9.7 10.0 9.7 10.0 9.7 10.0 9.7 10.0 9.7 10.0 9.5	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6 9.0 8.0 7.7 7.8 8.3 8.1 9.1 7.8 7.8 8.9	MAY 9.0 8.4 8.1 7.8 7.5 7.1 6.2 7.1 8.0 6.9 7.1 7.0 7.2 7.4 7.3 7.0 5.5 6.2 6.0 4.1 4.3 4.3	9.4 8.8 8.6 8.5 7.8 7.4 7.0 8.8 8.3 7.5 7.7 7.7 8.1 16.3 6.7 7.7 7.5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25		FEBRUARY		 10.1 10.5 10.5 10.2 10.2 10.2 10.1 11.4 11.9 11.6 11.2 9.7	MARCH 9.3 9.3 9.9 9.8 9.4 9.6 9.3 9.5 10.7 9.1 9.0 9.4	 9.9 10.1 10.1 10.1 9.9 9.9 10.0 9.8 10.0 10.8 11.1 10.4 9.4	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6 10.8 9.9 9.8 9.0 9.3 9.0 9.3 9.2 9.9 8.2 8.5 8.8	APRIL 10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.9 9.5 10.6 9.2 8.7 9.1 9.5 9.2 9.0 8.4 8.2 8.5 8.4 7.9 8.0 7.5 6.6 7.8	10.9 11.2 11.0 10.8 10.7 10.2 10.2 10.0 11.1 10.0 9.7 10.0 9.7 10.0 9.7 8.7 8.7 8.7 8.7 8.6 8.6 8.5 8.1 7.8	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.0 8.0 7.7 7.8 8.3 8.1 9.1 9.1 7.8 8.9 7.1 5.2 5.0 4.8 5.0	MAY 9.0 8.4 8.1 7.8 7.5 7.1 6.2 7.1 8.0 6.9 7.1 7.0 7.2 7.4 7.3 7.0 5.5 6.2 6.0 4.1 4.3 4.4 4.4	9.4 8.8 8.6 8.5 7.8 7.4 7.0 8.8 8.3 7.5 7.7 7.7 8.1 16.3 6.7 7.5 1.6 4.6 4.6 4.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24		FEBRUARY		 10.1 10.5 10.5 10.0 10.2 10.1 11.4	MARCH 9.3 9.3 9.9 9.8 9.4 9.6 9.3 9.5 10.7 9.1	 9.9 10.1 10.1 9.9 9.9 10.0 9.8 10.0	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6 10.8 9.9 9.8 9.0 9.3 9.0 9.2 9.9 8.9 8.9 8.2 8.5	APRIL 10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.9 9.5 10.6 9.2 8.7 9.1 9.5 9.2 9.0 8.4 8.2 8.5 8.4 7.9 8.0 7.5 6.6	10.9 11.2 11.0 10.8 10.7 10.7 10.2 10.0 11.1 10.0 9.7 10.0 9.5 9.5 9.3 8.7 8.7 8.6 8.6 8.5 8.1 7.8	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6 9.0 7.7 7.8 8.3 8.1 9.1 7.8 8.9 7.1 5.2 4.8	MAY 9.0 8.4 7.8 7.5 7.1 6.2 7.0 7.2 7.4 7.3 7.0 5.5 6.2 6.0 4.1 4.3 4.4	9.4 8.8 8.6 8.5 7.8 7.4 7.0 8.8 8.3 7.4 7.5 7.7 7.8 8.1 8.1 6.7 7.7 5.1 4.6 4.6
1 2 3 4 4 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28		FEBRUARY		 10.1 10.5 10.5 10.2 10.2 10.2 10.1 11.4 11.9 9.7 9.7 9.7	MARCH 9.3 9.3 9.9 9.4 9.6 9.3 9.5 10.7 9.1 9.0 9.4 9.7 9.1 9.0	 9.9 10.1 10.1 10.1 9.9 9.9 10.0 9.8 10.0 10.8 11.1 10.4 9.4 9.5	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6 10.8 9.9 9.8 9.0 9.3 9.0 9.3 9.0 9.2 8.5 8.8 9.2	APRIL 10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.9 9.5 10.6 9.2 8.7 9.1 9.5 9.2 8.4 8.2 8.5 8.4 7.9 8.0 7.5 6.6 7.8 8.4 8.7 8.9	10.9 11.2 11.0 10.8 10.7 10.2 10.2 10.0 11.1 10.0 9.7 10.0 9.5 9.5 9.3 8.7 8.7 8.7 8.7 8.6 8.6 8.5 8.1 7.8 8.2	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.0 8.0 7.7 7.8 8.3 8.1 9.1 7.8 7.8 8.9 7.1 5.2 5.0 4.8 5.0	MAY 9.0 8.4 8.1 7.8 7.5 7.1 6.2 7.1 8.0 6.9 7.1 7.0 7.2 7.4 7.3 7.0 5.5 6.0 4.1 4.3 4.4 4.5 5.1 4.9	9.4 8.8 8.5 7.4 7.0 8.0 8.8 8.3 7.5 7.5 7.7 7.8 8.1 1.3 6.7 7 5.7 7.1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29		FEBRUARY		 10.1 10.5 10.5 10.0 10.2 10.1 11.4 11.9 11.6 11.2 9.7 9.7 10.7 11.3 11.0	MARCH 9.3 9.3 9.9 9.8 9.4 9.6 9.3 9.5 10.7 9.1 9.0 9.4 9.4 9.7 2.10.2	 9.9 10.1 10.1 9.9 9.9 10.0 9.8 10.0 10.8 11.1 10.4 9.4 9.5	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6 10.8 9.9 9.8 9.0 9.3 9.0 9.2 9.9 8.9 8.9 8.9 8.9 8.9 8.2 8.5 8.8 9.2 10.6 10.7 11.7 11.7	APRIL 10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.9 9.5 10.6 9.2 8.7 9.5 9.2 9.0 8.4 8.5 8.4 7.9 8.0 7.5 6.6 7.8 8.4 8.7 9.9	10.9 11.2 11.0 10.8 10.7 10.7 10.2 10.0 11.1 10.0 9.7 10.0 9.5 9.3 8.7 8.7 8.6 8.6 8.5 8.1 7.8 8.2 8.8 9.4 10.6	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6 9.0 8.3 8.1 9.1 7.8 8.3 8.1 9.1 7.8 8.9 7.1 5.2 5.0 4.8 5.0	MAY 9.0 8.4 7.8 7.5 7.1 6.2 7.1 8.0 6.9 7.0 7.2 7.4 7.3 7.0 5.5 6.2 6.0 4.1 4.3 4.4 4.5 5.1 4.9 8.4	9.4 8.8 8.6 7.8 7.4 7.0 8.8 8.3 7.4 7.5 7.7 7.8 8.1 1.6 4.6 4.7 5.7 7.7 7.1 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0
1 2 3 4 4 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28		FEBRUARY		 10.1 10.5 10.5 10.2 10.2 10.2 10.1 11.4 11.9 9.7 9.7 9.7	MARCH 9.3 9.3 9.9 9.4 9.6 9.3 9.5 10.7 9.1 9.0 9.4 9.7 9.1 9.0	 9.9 10.1 10.1 10.1 9.9 9.9 10.0 9.8 10.0 10.8 11.1 10.4 9.4 9.5	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6 10.8 9.9 9.8 9.0 9.3 9.0 9.3 9.0 9.2 8.5 8.8 9.2	APRIL 10.2 10.1 10.8 10.4 10.4 10.3 9.8 9.9 9.5 10.6 9.2 8.7 9.1 9.5 9.2 8.4 8.2 8.5 8.4 7.9 8.0 7.5 6.6 7.8 8.4 8.7 8.9	10.9 11.2 11.0 10.8 10.7 10.2 10.2 10.0 11.1 10.0 9.7 10.0 9.5 9.5 9.3 8.7 8.7 8.7 8.7 8.6 8.6 8.5 8.1 7.8 8.2	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.0 8.0 7.7 7.8 8.3 8.1 9.1 7.8 7.8 8.9 7.1 5.2 5.0 4.8 5.0	MAY 9.0 8.4 8.1 7.8 7.5 7.1 6.2 7.1 8.0 6.9 7.1 7.0 7.2 7.4 7.3 7.0 5.5 6.0 4.1 4.3 4.4 4.5 5.1 4.9	9.4 8.8 8.5 7.4 7.0 8.8 8.3 7.5 7.5 7.7 7.8 8.1 1.6 3.3 6.7 7 5.1 6.4 4.6 4.7 5.7 7.1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30		FEBRUARY		 10.1 10.5 10.5 10.0 10.2 10.1 11.4 11.9 11.6 11.2 9.7 9.7 10.7 11.3 11.0 11.9 13.0	MARCH 9.3 9.3 9.9 9.8 9.4 9.6 9.3 9.5 10.7 9.1 9.0 9.4 9.7 9.1 9.4 9.7 9.2 10.2 9.4	 9.9 10.1 10.1 9.9 9.9 10.0 9.8 10.0 10.8 11.1 10.4 9.5 9.5	11.2 12.3 11.4 11.1 11.2 11.0 10.6 10.5 11.7 11.9 11.1 9.2 10.6 10.8 9.9 9.3 9.0 9.3 9.0 9.2 9.8 9.0 9.2	APRIL 10.2 10.18 10.4 10.4 10.3 9.8 9.9 9.5 10.6 9.2 8.7 9.1 9.5 9.2 9.0 8.4 8.2 8.6 7.9 8.0 7.5 6.6 7.8 8.4 8.7 8.9 9.9	10.9 11.2 11.0 10.8 10.7 10.7 10.2 10.0 11.1 10.0 9.7 10.0 9.5 9.3 8.7 8.6 8.5 8.7 8.6 8.5 8.1 7.8 8.2	9.9 9.3 9.6 9.2 8.5 7.9 7.6 9.0 9.6 9.0 8.0 7.7 7.8 8.3 8.1 9.1 7.8 8.9 7.1 5.2 5.0 4.8 5.0 5.5 8.0 10.5 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0	MAY 9.0 8.4 7.5 7.1 6.2 7.1 8.0 6.9 7.1 7.0 7.2 7.4 7.3 7.0 5.5 6.0 4.1 4.3 4.4 4.5 5.1 4.9 8.4 6.2	9.4 8.8 8.5 7.8 7.4 7.0 8.8 8.3 7.5 7.7 7.8 8.1 16.3 7.7 5.1 6.3 7.7 5.7 7.1 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7

> 06892450 OLATHE LAKE NEAR OLATHE, KS--Continued OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

				(/	_,,							
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBE	R
1 2 3 4 5	6.0 5.5 6.3 5.3 5.6	4.2 4.3 5.1 3.9 4.2	4.8 4.9 5.7 4.9 5.1	9.1 11.5 10.3 9.6 10.1	3.2 8.4 7.4 6.8 6.7	6.4 10.2 9.5 8.1 8.3	11.8 12.0 12.4 13.4 13.4	9.1 9.3 9.1 8.7 7.7	10.4 10.6 10.6 10.4 10.6	9.9 10.1 9.6 11.6 11.7	6.0 7.2 6.1 5.0 9.0	7.4 8.7 7.6 7.0 10.3
6 7 8 9 10	5.4 5.4 5.2 5.1 7.8	4.2 4.6 4.5 4.4 4.3	5.0 5.1 4.8 4.7 5.8	10.2 9.9 9.9 8.5 8.8	8.4 7.9 7.4 5.9 2.4	9.4 8.8 8.4 7.4 6.9	13.5 11.8 13.6 13.3 8.6	6.1 4.9 6.5 3.0 3.5	10.5 8.9 11.1 9.9 6.3	9.7 7.8 7.1 6.2 9.9	7.8 5.7 4.7 4.9 5.5	8.7 7.0 6.0 5.7 6.9
11 12 13 14 15	11.6 11.0 8.9 7.0 8.3	4.8 5.6 7.0 5.6 4.9	7.7 9.0 7.8 6.4 5.8	8.4 7.8 5.2 5.6 5.4	3.5 4.0 2.9 2.5 2.9	6.0 5.3 3.9 3.9 4.0	7.2 9.7 10.0 10.4 9.5	5.0 5.1 7.3 7.2 6.3	6.0 7.5 9.0 9.1 7.7	10.2 9.9 9.1 10.4 8.7	6.6 6.8 6.8 7.8 6.1	8.5 8.0 7.9 9.4 7.4
16 17 18 19 20	9.3 8.1 7.1 6.3 5.5	4.1 5.0 6.1 4.5 4.1	6.9 7.2 6.6 5.6 4.9	5.0 6.5 7.3 8.5 8.6	2.6 3.5 4.3 3.7 5.9	3.9 4.6 5.4 6.1 7.5	7.5 7.9 7.0 10.3 9.8	4.9 6.0 6.1 4.7 7.9	6.3 6.6 6.4 6.7 8.8	9.1 8.6 8.2 7.8 10.5	5.9 7.2 4.3 4.3 7.3	7.2 7.7 6.7 5.5 8.6
21 22 23 24 25	5.0 5.7 7.9 10.8 10.4	3.8 3.8 5.5 4.6 4.6	4.1 4.7 6.7 7.7	9.5 9.7 9.8 10.6 10.2	6.3 7.2 7.8 8.0 8.4	7.7 8.7 8.8 9.4 9.2	10.7 9.4 10.0 10.0 9.3	6.7 8.3 7.1 7.6 5.6	9.0 8.9 8.3 8.7 7.6	12.4 12.9 11.4 7.9 7.7	7.8 10.4 7.7 5.6 6.3	9.2 11.6 9.2 6.7 6.9
26 27 28 29 30 31	10.4 11.0 11.8 11.0 8.6	3.7 3.6 4.4 5.3 4.5	7.3 5.7 8.5 9.8 6.0	9.1 9.7 9.5 11.5 12.0 11.8	7.4 6.7 7.4 8.2 9.5 9.5	8.3 7.8 8.2 9.8 10.9	11.5 12.4 13.4 13.7 11.1 8.0	7.6 9.3 8.4 10.2 7.9 3.6	9.3 10.5 10.6 11.8 9.7 5.6	10.2 12.0 14.3 12.2 10.1	5.0 5.3 6.8 7.7 5.2	7.7 8.5 10.6 10.1 7.9
MONTH	11.8	3.6	6.2	12.0	2.4	7.5	13.7	3.0	8.8	14.3	4.3	8.0
YEAR	14.3	2.4	8.1									

AAAI	14.3	2.4	0.1									
TURBIDIT	Y, FIELD,	WATER,	UNFILTERED	, NEPHEI	OMETRIC	TURBIDITY	UNITS,	WATER	YEAR OCTOBER	2000	TO SEPTEMB	ER 20
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	C	CTOBER		NOV	EMBER		DI	ECEMBER	!		JANUARY	
1				13	<2.0	2.2						
2				<2.0	<2.0	<2.0						
3				2.1	<2.0	<2.0						
4				16	<2.0	<2.0						
5				5.3	<2.0	<2.0						
6				49	<2.0	7.0						
7				74	<2.0	15						
8				<2.0	<2.0	<2.0						
9				<2.0	<2.0	<2.0						
10				<2.0	<2.0	<2.0						
11				<2.0	<2.0	<2.0						
12				<2.0	<2.0	<2.0						
13				<2.0	<2.0	<2.0						
14												
15												
16												
17												
18												
19		16	19									
20	19	14	17									
21		11	14									
22	14	9.5	11									
23	11	7.4	9.3									
24	11	3.7	7.2									
25	5.1	2.1	3.7									
26												
27	7.2	<2.0	5.1									
28	9.3	4.8	6.9									
29	21	<2.0	5.1									
30	43	<2.0	6.7									
31	120	<2.0	9.4									
MONTH	120	2.0	9.5	74	2.0	3.4						

3.1

9.5

9.8

5.1

MONTH

YEAR

7.8

2.0

< Actual value is known to be less than the value shown

06892460 CEDAR CREEK BELOW OLATHE LAKE NEAR OLATHE, KS

LOCATION.--Lat 38°53'02", long $94^\circ52'48"$, in NW $^1/_4$ NW $^1/_4$ NE $^1/_4$ sec.32, T.13 S., R.23 E., Johnson County, Hydrologic Unit 10270104, on right upstream bank of Cedar Creek on Santa Fe Stream, 2 mi west of Olathe.

DRAINAGE AREA.--17.3 mi².

PERIOD OF RECORD. -- March 2001 to September 2001.

MTN

AC-FT

GAGE.--Water-stage recorder. Datum of gage is 880.00 ft above sea level.

REMARKS.--Records good. Majority of flow regulated by Olathe lake located 0.5 mi upstream. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP 52 .74 .73 16 2.3 .00 2 ___ ___ ___ ---___ ___ 4.7 106 1.9 .00 2.4 3 ------------------31 76 .35 1.4 .00 .18 ---25 51 272 ------___ 5 ___ 13 14 61 .00 .00 .00 ---------15 138 .00 ___ ------2.6 8.4 9.7 5.7 44 .00 .00 8 ------21 .00 ---------.00 5.3 1.1 ---------------.00 10 10 5.5 11 .48 .00 .33 ---------------52 7.3 11 ---2.6 8.4 46 .00 2.2 8.0 7.8 12 3.8 17 .00 .08 9.1 13 6.1 3.5 5.5 .00 .00 ---------------2.2 14 10 9.9 .00 .00 2.0 15 60 55 .50 .00 .00 16 17 ---105 13 .19 .66 1.9 .00 .00 ------------7.8 36 12 1.8 .56 39 .00 20 7.7 49 2.6 18 .06 .00 104 ---14 12 13 7.2 19 ---___ ---___ 8.3 .54 .03 .00 37 20 ------188 9.1 5.6 .00 .00 21 ___ ---___ ___ ___ 10 9.3 3.9 12 11 82 .00 0.0 3.7 4.2 22 ---------------5.4 26 .00 .00 23 8.4 1.4 3.0 13 .00 .00 3.0 7.1 .56 .77 7.9 24 ___ ---___ ___ ___ 1.4 .00 .00 2.5 25 .70 6.4 .00 .00 .95 7.6 7.0 1.0 .28 3.2 26 0.0 ___ ___ ___ ___ .00 53 27 .84 .10 .00 1.4 .00 2.2 3.7 1.8 28 1.0 .05 1.2 .00 .00 .74 3.7 29 ___ ___ ___ ___ ___ 9.5 7.8 1.7 .22 1.7 .00 0.0 30 .93 .00 .00 31 ---6.6 5.5 .00 18 MEAN 8.16 38.8 6.71 .58 ------MAX ------------55 51 272 46 18 104

05

502

56

663

50

2310

0.0

162

0.0

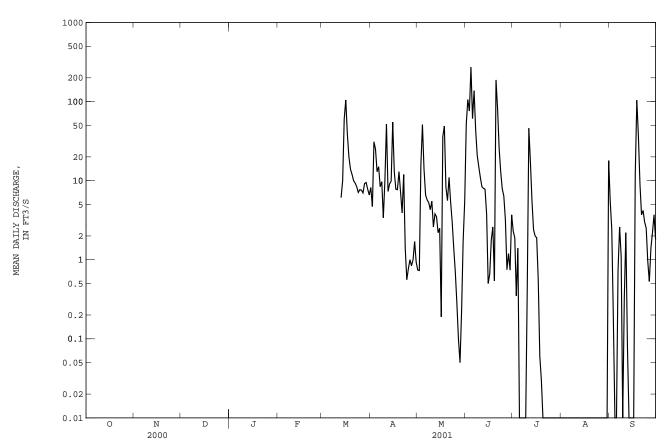
36

0.0

06892460 CEDAR CREEK BELOW OLATHE LAKE NEAR OLATHE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN							11.1	8.16	38.8	2.64	.58	6.71
MAX							11.1	8.16	38.8	2.64	.58	6.71
(WY)							2001	2001	2001	2001	2001	2001
MIN							11.1	8.16	38.8	2.64	.58	6.71
(WY)							2001	2001	2001	2001	2001	2001



06893080 BLUE RIVER NEAR STANLEY, KS

LOCATION.--Lat $38^{\circ}48^{\circ}45^{\circ}$, long $94^{\circ}40^{\circ}31^{\circ}$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.19, T.14 S., R.25 E., Johnson County, Hydrologic Unit 10300001, on left bank between bridges on U.S. Highway 69, 0.5 mi downstream from confluence of Wolf and Coffee Creeks, and 3.0 mi south of Stanley.

DRAINAGE AREA. --46 mi², approximately.

PERIOD OF RECORD.--Annual maximum, water years 1970-74. October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 886.05 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1974, crest-stage gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft^3/s and maximum (*):

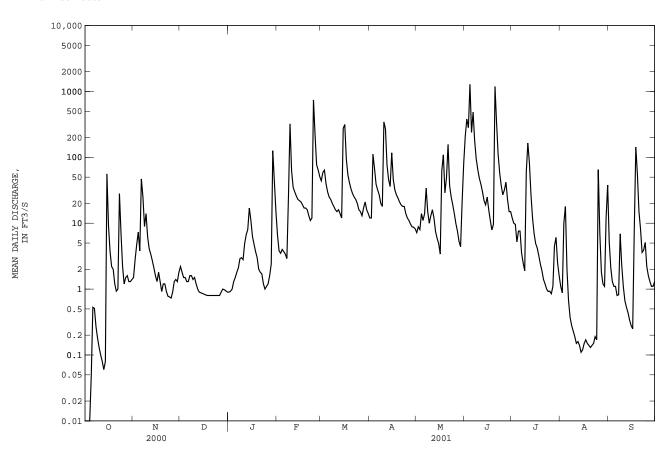
Date	Tit	me	Discharg (ft ³ /s)		ge height (ft)		Date	Tim	ıe	Discharge (ft ³ /s)		e height (ft)
Feb 24 Apr 10 Jun 1	160 200 230	00	1,440 1,810 1,650)	9.31 10.06 9.73		Jun 4 Jun 20	081 070		*3,980 3,730		13.36 13.03
		DISCHA	ARGE, CUBI	C FEET PE	ER SECOND, DAILY	WATER YE MEAN VA		R 2000 TO) SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.01 .00 .00 .00	1.5 2.8 4.7 7.3 3.8	2.2 1.8 1.5 1.5	e.90 e.93 e1.0 e1.3 1.5	6.6 3.8 3.5 4.0 3.7	44 59 64 40 30	12 12 112 68 39	7.2 8.8 8.0 14 11	210 381 282 1280 239	12 10 9.6 5.2 7.6	1.1 .88 10 18 2.0	5.2 2.1 1.3 1.1
6 7 8 9 10	.53 .51 .27 .18	47 25 8.9 14 6.2	1.3 1.6 1.6 1.4	1.8 2.1 2.9 3.0 2.8	3.4 2.9 25 322 63	25 23 20 18 16	32 27 20 18 345	14 34 15 10 13	485 179 95 65 48	7.6 3.5 2.5 1.9	.67 .37 .28 .23	.80 .82 6.9 2.3
11 12 13 14 15	.10 .08 .06 .08	4.1 3.4 2.7 2.1 1.6	1.2 e1.0 e.90 e.88 e.86	4.9 6.7 8.0 17	35 e30 e26 e23 e22	15 16 14 12 275	270 76 46 36 117	16 12 7.5 5.9 4.9	39 30 22 19 25	165 81 27 12 6.9	.15 .16 .14 .11	.67 .53 .44 .34
16 17 18 19 20	9.1 3.7 2.2 2.0 1.2	1.3 1.8 1.3 .92	e.84 e.82 e.80 e.80	6.3 4.8 3.7 3.0 2.0	e21 19 17 17 16	315 93 54 41 33	46 32 27 24 21	3.4 63 109 29 49	16 11 7.9 9.6 1190	4.9 4.2 3.2 2.4 1.9	.15 .17 .15 .14	.25 7.6 143 56 15
21 22 23 24 25	.93 1.0 28 6.9 2.2	1.2 .92 .78 .76	e.80 e.80 e.80 e.80	1.8 1.7 e1.2 e1 e1.1	13 11 12 743 221	28 25 23 20 16	19 18 18 14 12	157 37 25 19 14	336 111 58 37 27	1.4 1.2 1.0 .92 .93	.14 .15 .19 .17	8.2 3.6 3.9 5.1 2.2
26 27 28 29 30 31	1.2 1.5 1.6 1.3 1.3	.90 1.3 1.4 1.3 1.8	e.80 e.90 e1.0 e.98 e.94 e.90	e1.2 1.6 2.4 126 43 15	77 64 51 	15 13 17 21 16 14	9.7 8.8 8.7 8.2	9.9 7.6 5.3 4.4 21 81	32 42 23 15 15	.85 1.1 4.5 6.1 2.5 1.6	7.0 1.8 1.2 1.1 12 38	1.6 1.3 1.1 1.1 1.3
MEAN MAX MIN AC-FT	3.98 56 .00 245	5.09 47 .73 303	1.10 2.2 .80 68	9.08 126 .90 559	66.3 743 2.9 3680	45.6 315 12 2810	50.2 345 8.2 2990	26.3 157 3.4 1620	178 1280 7.9 10570	14.5 165 .85 894	5.22 65 .11 321	9.21 143 .25 548

06893080 BLUE RIVER NEAR STANLEY, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	JUL	AUG		SEP
MEAN MAX (WY) MIN (WY)	28.0 200 1987 .000 1979	31.0 200 1999 .016 1981	21.8 143 1993 .040 1977	15.1 65.3 1982 .042 1977	35.9 208 1985 .45 1977	41.3 133 1987 .78 1996	57.5 223 1983 1.12 1996	79.9 450 1995 2.29 1988	1	57.5 182 1984 1.07 1988	28.6 415 1993 .040 1980	7.11 44.7 1996 .000 1991	1	8.2 237 986 000 976
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	AR YEAR	F	OR 2001 WAT	ER YE	AR		WATER YEA	ARS 1975	5 - 2	001
	MEAN ANNUAL M ANNUAL ME			7.85			34.0				35.9 104 4.99			993 976
HIGHEST	DAILY ME	EAN		182	Jun 21		1280	Jun	4		5520	May	17 1	995
LOWEST	DAILY MEA	AN		.00	Sep 3		.00	Oct	2		.00	Aug	9 1	976
ANNUAL	SEVEN-DAY	MINIMUM		.00	Sep 3		.13	Oct	8		.00	Aug	9 1	976
MAXIMUM	PEAK FLO	W					3980	Jun	4		20200	May	15 1	990
	PEAK STA						13.36	Jun	4		20.51	May	15 1	990
	ANEOUS LO						.00	Oct	1		.00	mos	st ye	ars
ANNUAL	RUNOFF (A	AC-FT)		5700			24600				26010			
	ENT EXCER			17			63				57			
50 PERC	ENT EXCER	EDS		2.2			5.3				5.0			
90 PERC	ENT EXCER	EDS		.04			.53				.08			

e Estimated



06893300 INDIAN CREEK AT OVERLAND PARK, KS

LOCATION.--Lat $38^\circ56'30"$, long $94^\circ40'10"$, in NW $^{1}/_{4}$ NE $^{1}/_{4}$ Sec.7, T.13 S., R.25 E., Johnson County, Hydrologic Unit 10300001, on right bank at downstream side of Marty Street bridge in Overland Park.

DRAINAGE AREA.--26.6 mi².

PERIOD OF RECORD.--March 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 856.88 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to May 17, 1977, water-stage recorder at site 700 ft downstream at same datum.

REMARKS.--Records good. Satellite telemeter at station.

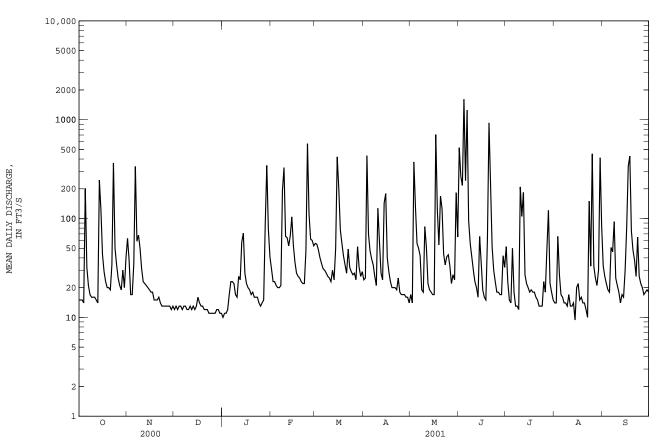
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Tin	ne	Discharge (ft ³ /s)	e Gage	e height (ft)		Date	Time	e	Discharge (ft ³ /s)		height (ft)
Oct 14 Oct 23 Nov 6 Apr 3 Apr 14 May 3 May 17	180 050 113 103 230 200 204	00 30 30 00 00	1,100 1,440 1,030 2,160 1,170 1,830 3,120	1	8.75 9.49 8.59 10.65 8.91 10.24		Jun 1 Jun 4 Jun 6 Jun 20 Aug 25 Aug 30 Sep 18	210 070 020 030 040 171 100	0 0 0 0 5	3,100 4,900 *5,180 2,690 2,180 1,610 1,060	1 *1 1	1.68 3.24 3.45 1.26 0.68 9.82 8.66
		DISCHA	ARGE, CUBIC	FEET PER		WATER YE.		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	15 15 15 14 202	63 38 17 17 35	12 13 12 13	10 11 11 12 17	31 23 23 21 20	56 55 48 40 35	24 25 434 69 47	17 14 374 131 56	521 267 216 1610 242	52 23 15 14 50	14 14 66 27 17	33 26 22 19 18
6 7 8 9 10	32 21 17 16 16	337 59 68 50 31	12 13 13 12 12	23 23 22 17 16	20 21 193 328 66	31 30 28 26 25	39 34 26 21 127	50 42 19 18 83	1250 95 56 41 30	18 13 13 12 209	16 14 14 13 17	51 46 93 25 21
11 12 13 14 15	16 15 14 245 122	23 22 21 20 19	13 12 13 12 13	26 24 58 71 28	64 53 67 104 53	23 30 24 50 421	58 28 24 144 179	51 22 19 18 17	23 20 16 66 36	105 184 27 22 20	13 13 14 9.4 20	18 14 17 16 30
16 17 18 19 20	43 29 23 20 20	18 18 15 15	16 14 13 13	22 20 19 17 18	36 28 26 25 23	203 77 56 42 34	40 29 23 20 20	17 709 120 54 169	19 16 15 62 929	18 19 18 18	22 15 16 14 14	82 338 428 75 48
21 22 23 24 25	19 34 365 50 34	16 14 13 13	12 12 11 11	16 16 16 14 13	22 22 47 572 110	28 49 32 29 27	20 19 25 18 17	125 44 34 41 43	222 52 30 23 18	15 13 13 13 23	12 10 150 33 452	38 26 65 26 22
26 27 28 29 30 31	25 21 19 30 20 40	13 13 13 12 13	11 11 12 12 11	14 15 88 345 78 41	62 60 53 	28 24 52 32 26 29	17 17 16 16 14	33 22 27 24 183 65	18 17 17 42 32	18 49 121 22 18 15	33 25 21 30 412 84	20 17 18 19 18
MEAN MAX MIN AC-FT	50.5 365 14 3110	34.5 337 12 2050	12.3 16 11 756	36.2 345 10 2220	77.6 572 20 4310	54.5 421 23 3350	53.0 434 14 3150	85.2 709 14 5240	200 1610 15 11900	38.3 209 12 2350	52.4 452 9.4 3220	56.3 428 14 3350

06893300 INDIAN CREEK AT OVERLAND PARK, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	33.5 146 1986 .003 1964	26.3 114 1999 .47 1967	21.4 107 1993 .000 1964	18.5 99.1 1982 .26 1964	24.7 118 1985 .63 1964	34.1 208 1973 1.19 1964	43.2 158 1994 2.86 1977	55.3 243 1990 3.26 1965	68.4 263 1984 4.86 1968	33.2 248 1993 .91 1975	21.7 65.7 1985 .56 1967	44.1 217 1986 .66 1976
SUMMARY	STATIST	ICS	FOR	2000 CALENI	DAR YEAR	F	OR 2001 WA	TER YEAR		WATER YEA	RS 1964	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT	ANNUAL ME ANNUAL ME DAILY ME SEVEN-DA! PEAK FLO PEAK STA ANEOUS LO	EAN EAN AN MINIMUM DW AGE DW FLOW		32.8 844 8.6 11	Jun 20 May 5 Dec 21		62.2 1610 9.4 11 5180 13.45 1.3	Jun 4 Aug 14 Dec 26 Jun 6 Jun 6 Aug 14		35.3 89.5 8.32 4340 .00 .00 12800 17.78 .00	Jun Oct Oct Jun Jun man	1993 1976 9 1984 1 1963 1 1963 9 1984 9 1984 y years
10 PERC 50 PERC	RUNOFF (# ENT EXCER ENT EXCER	EDS EDS		23810 53 16 12			45020 121 23 13			25610 57 13 1.4		



06910800 MARAIS DES CYGNES RIVER NEAR READING, KS

LOCATION.--Lat $38^{\circ}34^{\circ}00^{\circ}$, long $95^{\circ}57^{\circ}50^{\circ}$, in NE $^{1}/_{4}$ SE $^{1}/_{4}$ SW $^{1}/_{4}$ sec.15, T.17 S., R.13 E., Lyon County, Hydrologic Unit 10290101, on left bank at downstream side of county highway bridge, 1.9 mi downstream from confluence of One Hundred and Fortytwo Mile Creek and Elm Creek, 4.3 mi upstream from Duck Creek, 3.0 mi north of Reading, and at mile 467.0.

DRAINAGE AREA. -- 177 mi².

PERIOD OF RECORD. -- May 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,048.32 ft above sea level (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are fair. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

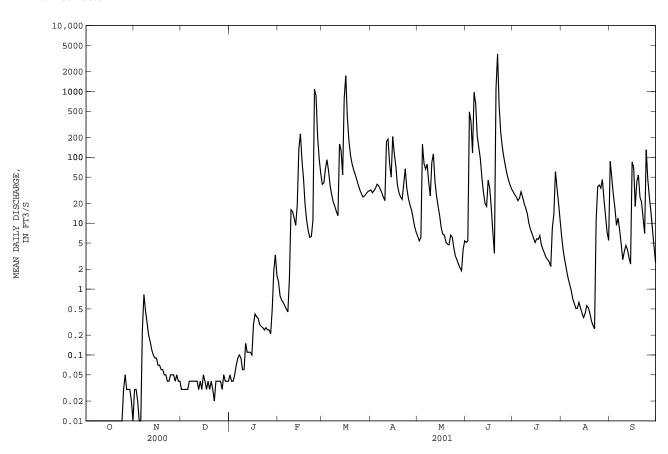
Date	Tim	ie	Discharge (ft ³ /s)	Ga	ge height (ft)		Date	Tim	ne	Discharge (ft ³ /s)		height (ft)
Mar 16	040	0	3,180		14.25		Jun 21	143	30	*4,870	*1	9.96
		DISCHA	ARGE, CUBIC	FEET P		WATER YE Y MEAN VA		R 2000 TO) SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	.03 .03 .02 .01	.03 .03 .03 .03	.05 .04 .04 .05	1.3 .79 .68 .63	39 41 67 92 62	32 29 31 34 39	6.3 5.4 6.1 158 81	5.1 5.4 490 355 117	30 27 25 22 24	6.1 3.8 2.7 2.0 1.5	87 49 27 17 9.3
6 7 8 9 10	.00 .00 .00 .00	.24 .83 .47 .31 .20	.04 .04 .04 .04	.09 .10 .09 .06	.50 .45 1.5 16	37 27 21 18 15	37 33 29 25 22	66 79 42 26 84	970 657 212 142 95	30 25 20 17 14	1.2 .97 .72 .61 .51	12 7.9 4.9 2.8 3.7
11 12 13 14 15	.00 .00 .00 .00	.16 .12 .10 .09	.04 .03 e.04 e.03 e.05	.15 .11 .11 .11	12 9.3 19 134 227	13 159 127 54 789	174 189 81 50 206	112 43 26 18 13	49 29 20 18 45	10 8.1 7.0 5.9 5.1	.51 .63 .52 .43	4.6 4.0 3.0 2.4
16 17 18 19 20	.00 .00 .00 .00	.07 .07 .06 .06	e.04 e.03 e.04 e.03	.29 .42 .38 .36	90 47 19 11 7.7	1730 407 181 108 80	115 73 38 29 25	8.5 6.8 6.6 5.2 4.8	34 17 7.2 3.5	5.8 5.7 6.5 4.7 4.0	.43 .56 .52 .43	69 18 43 54 25
21 22 23 24 25	.00 .00 .00 .00	.05 .04 .04 .05	e.03 e.02 e.04 e.04	.27 .26 .24 .26	6.1 6.3 11 1080 855	65 55 46 38 32	23 39 67 34 24	4.7 6.6 6.2 4.3 3.2	3710 620 242 145 101	3.5 3.0 2.8 2.6 2.2	.28 .25 11 36 38	21 12 7.0 130 47
26 27 28 29 30 31	.05 .03 .03 .03 .02	.05 .04 .05 .04	.04 e.03 .05 .04 .04	.24 .21 .50 1.9 3.3 1.6	206 95 57 	28 25 26 28 30 31	19 16 12 8.9 7.3	2.8 2.4 2.1 1.9 4.0 5.4	74 56 45 38 33	8.4 14 61 34 20	34 46 23 13 7.3 5.5	25 15 8.1 4.4 2.5
MEAN MAX MIN MED AC-FT	.006 .05 .00 .00	.12 .83 .01 .05 6.9	.036 .05 .02 .04 2.2	.39 3.3 .04 .21 24	105 1080 .45 12 5810	144 1730 13 41 8870	51.4 206 7.3 32 3060	27.1 158 1.9 6.6 1670	314 3710 3.5 65 18690	14.8 61 2.2 10 911	7.72 46 .25 .97 474	26.7 130 2.4 14 1590

06910800 MARAIS DES CYGNES RIVER NEAR READING, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG SEP
MEAN 81.5 86.2 MAX 773 978 (WY) 1986 1999 MIN .000 .000 (WY) 1989 1989	57.3 47.8 276 208 1993 1974 .000 .000 1992 1992	100 424 1985 .013 1992	155 744 1973 .66 1989	175 778 1983 .74 1981	241 1766 1982 13.6 1980	206 1173 1977 .58 1989	88.9 875 1993 .27 1980	24.8 67.4 156 828 1977 1973 .000 .000 1991 1991
SUMMARY STATISTICS	FOR 2000 CALEN	DAR YEAR	FO	R 2001 WAT	TER YEAR		WATER YEA	ARS 1970 - 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN	27.9			56.8			111 296 8.37	1999 1991
HIGHEST DAILY MEAN LOWEST DAILY MEAN	1650 .00	Feb 25 Aug 21		3710	Jun 21 Oct 1		25000 .00	May 29 1982 Sep 8 1976
ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE	.00	Aug 21		.00 4870 19.96	Oct 1 Jun 21 Jun 21		.00 67400 27.47	Sep 8 1976 May 29 1982 May 29 1982
INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT)	20230			.00 41110	Oct 1		.00 80280	many years
10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS	55 2.3 .00			88 5.4 .03			172 14 .14	

e Estimated



06910997 MELVERN LAKE NEAR MELVERN, KS

LOCATION.--Lat 38°30'34", long 95°42'36", in NW $^1/_4$ SW $^1/_4$ SW $^1/_4$ sec.1, T.18 S., R.15 E., Osage County, Hydrologic Unit 10290101, in control tower of Melvern Dam on Marais des Cygnes River, 4.0 mi west of Melvern, and at mile 447.7.

DRAINAGE AREA. -- 349 mi².

PERIOD OF RECORD. -- November 1972 to current year.

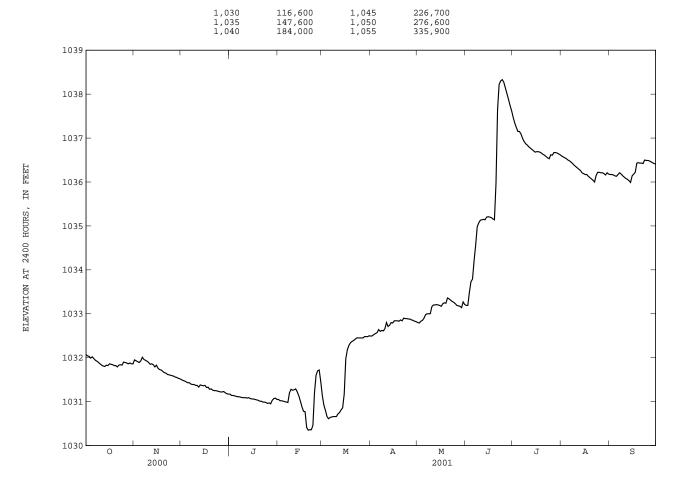
GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began in July 1972. Conservation pool elevation first reached Apr. 4, 1975. Total capacity, 920,600 acre-ft, consisting of the following: Dead storage, 26 acre-ft below elevation 962.0 ft; conservation pool, 154,400 acre-ft between elevations 962.0 ft and 1,036.0 ft; flood-control pool, 258,600 acre-ft between elevations 1,036.0 ft and 1,057.0 ft; and surcharge pool, 507,600 acre-ft between elevations 1,057.0 ft and 1,073.0 ft. Reservoir is used to store water for flood control, irrigation, and recreation. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,053.45 ft June 13, 1995, contents, 316,300 acre-ft; minimum elevation since conservation pool first reached, 1,029.86 ft Feb. 11, 1992, contents, 115,800 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,038.35 ft June 25, contents, 171,300 acre-ft; minimum elevation, 1,030.34 ft Feb. 21 contents, 118,600 acre-ft.

Capacity table (elevation, in feet, and total contents, in acre-feet) (Computed by U.S. Army Corps of Engineers in 1963)



06910997 MELVERN LAKE NEAR MELVERN, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1032.07	1031.95	1031.50	1031.17	1031.05	1031.14	1032.49	1032.80	1033.19	1037.47	1036.59	1036.17
2	1032.04	1031.93	1031.48	1031.14	1031.02	1030.92	1032.50	1032.79	1033.19	1037.34	1036.57	1036.17
3	1032.03	1031.91	1031.47	1031.14	1031.02	1030.80	1032.53	1032.83	1033.49	1037.24	1036.55	1036.16
4	1031.99	1031.89	1031.45	1031.13	1031.01	1030.66	1032.55	1032.85	1033.73	1037.15	1036.53	1036.14
5	1032.02	1031.93	1031.43	1031.12	1031.00	1030.61	1032.57	1032.90	1033.79	1037.15	1036.50	1036.13
6 7 8 9 10	1031.98 1031.94 1031.92 1031.89 1031.86		1031.43 1031.40 1031.39 1031.39	1031.11 1031.11 1031.10 1031.09 1031.09	1030.99 1030.98 1031.20 1031.28 1031.26	1030.64 1030.65 1030.66 1030.66 1030.66	1032.64 1032.60 1032.62 1032.61 1032.66	1032.98 1033.00 1033.00 1033.16	1034.21 1034.56 1034.98 1035.07 1035.13	1037.09 1036.99 1036.92 1036.87 1036.84	1036.48 1036.45 1036.42 1036.38 1036.35	1036.17 1036.21 1036.18 1036.14 1036.11
11	1031.83	1031.85	1031.37	1031.09	1031.27	1030.72	1032.80	1033.20	1035.14	1036.80	1036.32	1036.08
12	1031.81	1031.86	1031.33	1031.08	1031.29	1030.75	1032.71	1033.20	1035.15	1036.77	1036.29	1036.06
13	1031.80	1031.84	1031.38	1031.09	1031.22	1030.81	1032.74	1033.21	1035.14	1036.74	1036.26	1036.03
14	1031.83	1031.79	1031.37	1031.07	1031.13	1030.86	1032.80	1033.20	1035.20	1036.71	1036.21	1035.99
15	1031.82	1031.83	1031.36	1031.06	1031.01	1031.17	1032.79	1033.19	1035.21	1036.68	1036.19	1036.14
16	1031.86	1031.76	1031.37	1031.06	1030.88	1031.97	1032.84	1033.17	1035.20	1036.69	1036.17	1036.18
17	1031.85	1031.73	1031.32	1031.05	1030.78	1032.18	1032.84	1033.23	1035.19	1036.69	1036.17	1036.22
18	1031.84	1031.72	1031.33	1031.04	1030.77	1032.28	1032.84	1033.25	1035.16	1036.68	1036.13	1036.43
19	1031.82	1031.69	1031.28	1031.03	1030.41	1032.34	1032.83	1033.24	1035.14	1036.66	1036.10	1036.44
20	1031.82	1031.66	1031.29	1031.01	1030.35	1032.37	1032.86	1033.36	1035.97	1036.63	1036.07	1036.43
21 22 23 24 25	1031.79 1031.83 1031.84 1031.83 1031.90	1031.65 1031.62 1031.61 1031.60 1031.59	1031.26 1031.25 1031.25 1031.24 1031.23	1031.01 1030.99 1030.99 1030.98 1030.96	1030.36 1030.36 1030.46 1031.20 1031.60	1032.39 1032.42 1032.45 1032.45	1032.84 1032.90 1032.89 1032.89 1032.88	1033.34 1033.31 1033.28 1033.26 1033.23	1037.65 1038.22 1038.30 1038.33 1038.27	1036.61 1036.58 1036.55 1036.53 1036.62	1036.04 1036.00 1036.15 1036.22 1036.22	1036.43 1036.42 1036.50 1036.49
26 27 28 29 30 31	1031.89 1031.88 1031.86 1031.88 1031.86 1031.86	1031.58 1031.56 1031.55 1031.53 1031.52	1031.22 1031.22 1031.23 1031.20 1031.18 1031.17	1030.97 1030.95 1031.03 1031.07 1031.08 1031.05	1031.70 1031.72 1031.46 	1032.45 1032.45 1032.48 1032.48 1032.48 1032.50	1032.88 1032.86 1032.85 1032.83 1032.82	1033.19 1033.18 1033.17 1033.14 1033.27 1033.21	1038.14 1038.01 1037.88 1037.74 1037.62	1036.61 1036.67 1036.67 1036.66 1036.64 1036.62	1036.21 1036.21 1036.19 1036.16 1036.21 1036.18	1036.48 1036.46 1036.44 1036.42 1036.41
MEAN	1031.89	1031.76	1031.33	1031.06	1031.03	1031.61	1032.75	1033.13	1035.80	1036.80	1036.27	1036.27
MAX	1032.07	1032.01	1031.50	1031.17	1031.72	1032.50	1032.90	1033.36	1038.33	1037.47	1036.59	1036.50
MIN	1031.79	1031.52	1031.17	1030.95	1030.35	1030.61	1032.49	1032.79	1033.19	1036.53	1036.00	1035.99
(+)	127,600	125,500	123,400	122,700	125,100	131,400	133,400	135,900	165,900	158,700	155,600	157,200
(#)	-1,400	-2,100	-2,100	-700	+2,400	+6,300	+2,000	+2,500	+30,300	-7,200	-3,100	+1,600

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

06911490 SALT CREEK AT LYNDON, KS

LOCATION.--Lat $38^\circ36^\circ07^\circ$, long $95^\circ41^\circ05^\circ$, in SE $^1/_4$ SE $^1/_4$ NW $^1/_4$ sec.06, T.17 S., R.16 E., Osage County, Hydrologic Unit 10290101, on left bank at upstream side of Interstate Highway 75 bridge, 0.25 mi south of Lyndon, and at mile 16.6.

DRAINAGE AREA.--97.8 mi².

PERIOD OF RECORD. -- Otober 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 979.79 ft above sea level. Prior to Oct. 1, 1999, recording gage at site 0.5 mi north and 2.5 mi east of present site.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft^3/s and maximum (*):

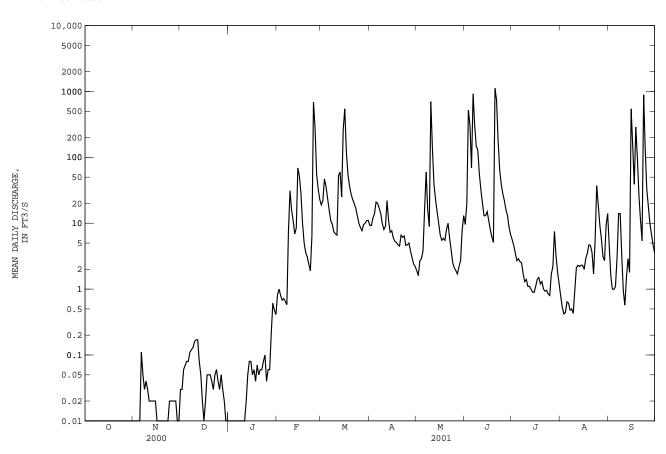
Date	Time		Discharge (ft ³ /s)	: Gag	e height (ft)		Date	Tim				e height (ft)
Sep 23	100	0	*2,280		*5.67		No peak	greater	than bas	e discharge	· .	
		DISCHA	RGE, CUBIC	FEET PE		WATER YEA Y MEAN VAI	AR OCTOBER LUES	2000 TC	SEPTEMBE	R 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	.00 .00 .00 .00	.03 .03 .06 .07	.01 .00 .00 .00	.82 1.0 .80 .68	19 22 47 36 24	9.3 9.2 12 14 21	1.9 1.6 2.7 2.9 3.8	9.6 20 518 307 69	5.6 4.6 3.5 2.7 2.9	.78 .53 .42 .44	4.6 1.6 1.0 .99
6 7 8 9 10	.00 .00 .00 .00	.11 .05 .03 .04	.08 .11 .12 .13 .16	.00 .01 .01 .00	.65 .58 7.6 31	16 11 9.7 7.4 6.9	20 17 14 9.8 8.0	16 60 16 8.9 702	919 311 149 128 56	2.6 2.5 1.7 1.3	.61 .48 .50 .43	3.0 14 14 3.3 .94
11 12 13 14 15	.00 .00 .00 .00	.02 .02 .02 .02 .02	.17 .17 e.08 e.05 e.02	.01 .02 .05 .08	11 6.9 8.4 69 52	6.6 53 60 25 264	9.0 22 11 7.3 7.7	138 39 23 15 10	32 20 13 13	1.1 1.1 1.0 .90	2.1 2.3 2.2 2.3 2.3	.57 1.5 2.9 1.8 544
16 17 18 19 20	.00 .00 .00 .00	.01 .01 .01 .01	e.01 .02 .05 .05	.05 .06 .04 .07	28 10 5.1 3.6 3.1	544 123 56 37 28	6.0 5.3 5.1 4.7 4.5	6.6 5.5 5.9 5.5 8.0	11 8.0 6.2 5.1 1120	1.1 1.4 1.5 1.2	2.0 2.9 3.5 4.7 4.6	152 39 288 97 26
21 22 23 24 25	.00 .00 .00 .00	.00 .01 .01 .02	e.04 e.03 .05 .06	.06 .06 .08 .10	2.4 1.9 6.4 691 279	23 20 17 13 10	6.6 6.1 6.4 4.6 4.7	10 5.9 3.9 2.5 2.1	736 179 64 39 28	1.0 .93 .96 .84	3.6 1.7 5.5 37	11 5.4 889 135 33
26 27 28 29 30 31	.00 .00 .00 .00	.02 .02 .02 .01 .01	.03 .05 .03 .02 .01	.06 .06 .21 .61 .48	56 33 23 	8.6 7.7 9.5 10 11	5.0 3.8 3.0 2.4 2.2	1.9 1.7 2.2 2.7 7.8	22 16 13 8.6 6.7	1.7 2.2 7.5 3.2 1.8 1.2	9.4 5.8 3.1 2.7 9.2	18 10 6.8 4.7 3.6
MEAN MAX MIN AC-FT	.000	.018 .11 .00 1.1	.062 .17 .01 3.8	.087 .61 .00 5.4	48.2 691 .58 2680	49.6 544 6.6 3050	8.72 22 2.2 519	36.3 702 1.6 2230	161 1120 5.1 9600	2.01 7.5 .80 124	4.70 37 .42 289	77.1 889 .57 4590

06911490 SALT CREEK AT LYNDON, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	1.37 2.75 2000 .000 2001	5.19 10.4 2000 .018 2001	52.7 105 2000 .062 2001	4.17 8.25 2000 .087 2001	77.8 106 2000 48.2 2001	69.3 89.0 2000 49.6 2001	11.1 13.4 2000 8.72 2001	21.7 36.3 2001 7.12 2000	82.1 161 2001 2.71 2000	1.39 2.01 2001 .77 2000	2.41 4.70 2001 .11 2000	38.6 77.1 2001 .000 2000
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	AR YEAR	FC	OR 2001 WAS	TER YEAR		WATER YEA	ARS 2000	- 2001
	MEAN 'ANNUAL M ANNUAL ME			18.7			31.9			30.3 31.9 28.7		2001 2000
	DAILY ME			1200 .00	Feb 25 Aug 25		1120	Jun 20 Oct 1		1460 .00	Dec Aug 2	9 1999 25 2000
	SEVEN-DAY	MINIMUM W		.00	Aug 25		.00 2280	Oct 1 Sep 23		.00 2430		25 2000 9 1999
INSTANT	I PEAK STA ANEOUS LO	OW FLOW					5.67 .00			5.67 .00		23 2001 28 2000
10 PERC	RUNOFF (<i>I</i> ENT EXCE	EDS		13560 36			23090 38			21940 46		
	ENT EXCER			.69 .00			2.3			2.7		

e Estimated



Discharge

Gage height

06911900 DRAGOON CREEK NEAR BURLINGAME, KS

LOCATION.--Lat $38^{\circ}42^{\circ}30^{\circ}$, long $95^{\circ}50^{\circ}20^{\circ}$, in SE $^{1}/_{4}$ SE $^{1}/_{4}$ sec.27, T.15 S., R.14 E., Osage County, Hydrologic Unit 10290101, on left bank110 ft downstream from city of Burlingame pumping station and dam, 0.2 mi downstream from bridge on U.S. Highway 56, 2.0 mi downstream from Plum Creek, and 3.0 mi south of Burlingame.

WATER-DISCHARGE RECORDS

DRAINAGE AREA. -- 114 mi².

PERIOD OF RECORD. -- March 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,016.06 ft above sea level. Prior to June 8, 1960, nonrecording gage at bridge 180 ft upstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions 110 ft upstream from station for municipal supply of Burlingame. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1900, 23.4 ft June 26, 1946, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Gage height

Discharge

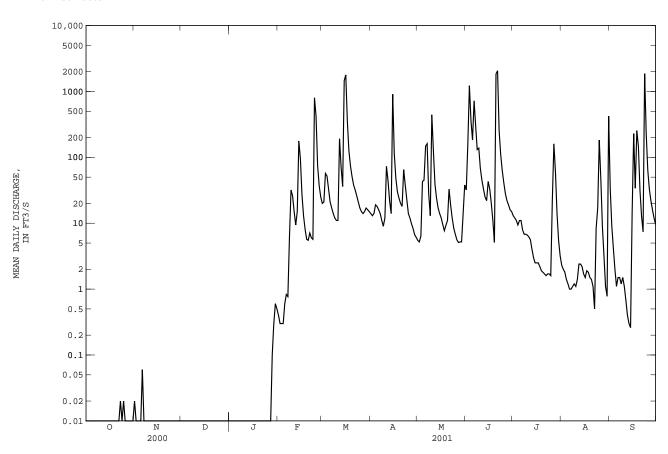
Date	Time		(ft ³ /s)	ou	(ft)		Date	Tim	e	(ft ³ /s)	. dag	(ft)
Feb 24 Mar 16 Apr 15 Jun 3	0230 *3 0915 2		1,550 *3,300 2,240 2,750	7.53 *14.44 10.04 12.29			Jun 20 1600 Jun 21 1300 Sep 23 1515		00	3,280 1		14.01 14.36 13.80
		DISCHAF	RGE, CUBIC	FEET PI	ER SECOND, DAILY	WATER YE MEAN VA		R 2000 TO) SEPTEMBI	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	.02 .00 .00 .00	.00 .00 .00 .00	e.00 e.00 e.00 e.00	e.40 e.30 e.30 e.30 e.60	20 21 57 52 33	14 13 14 19 18	5.5 5.2 6.4 43 45	32 158 1220 364 183	13 12 11 9.4 11	2.3 2.0 1.8 1.4 1.2	34 9.1 4.2 2.0 1.1
6 7 8 9 10	.00 .00 .00 .00	.06 .00 .00 .00	.00 .00 .00 .00	e.00 e.00 e.00 e.00	.83 .77 6.1 32 26	21 17 14 12 11	16 14 11 9.0 12	148 161 28 13 442	720 300 131 138 68	11 7.9 6.8 6.8 6.6	1.0 1.0 1.1 1.2 1.1	1.5 1.5 1.2 1.5 1.1
11 12 13 14 15	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 e.00 e.00 e.00	e.00 e.00 e.00 e.00	15 9.4 15 177 95	11 191 72 36 1460	73 44 22 14 907	125 39 24 17 14	45 33 25 22 43	6.2 5.6 4.0 3.0 2.5	1.4 2.4 2.4 2.2 1.7	.68 .40 .30 .26
16 17 18 19 20	.00 .00 .00 .00	.00 .00 .00 .00	e.00 e.00 e.00 e.00	.00 .00 e.00 e.00 e.00	27 13 8.1 5.7 5.5	1780 355 126 74 51	113 48 30 24 20	12 9.5 7.7 9.3	33 20 11 5.1 1840	2.5 2.5 2.2 1.9 1.8	1.5 1.9 1.8 1.5	229 34 255 148 32
21 22 23 24 25	.00 .00 .02 .00	.00 .00 .00 .00	e.00 e.00 e.00 e.00 e.00	e.00 e.00 e.00 e.00	7.1 6.0 5.7 800 416	38 32 26 21 17	18 65 38 23 14	33 19 12 8.4 6.8	2060 254 110 63 41	1.7 1.6 1.7 1.7	1.1 .50 8.3 17 183	13 7.4 1870 229 64
26 27 28 29 30 31	.00 .00 .00 .00	.00 .00 .00 .00	e.00 e.00 .00 .00 .00 e.00	e.00 e.00 e.10 e.30 e.60	75 37 25 	15 14 15 17 16 15	9.8 8.3 6.7 6.1	5.6 5.1 5.2 5.2 14 38	28 22 19 16 15	22 160 60 14 5.5 3.2	47 8.9 3.2 1.1 .78 421	33 22 16 12 9.6
MEAN MAX MIN MED AC-FT	.001 .02 .00 .00	.003 .06 .00 .00	.000 .00 .00 .00	.048 .60 .00 .00	64.6 800 .30 8.8 3590	150 1780 11 21 9200	54.5 907 6.1 17 3240	42.5 442 5.1 13 2610	267 2060 5.1 44 15910	12.9 160 1.6 5.6 795	23.4 421 .50 1.7 1440	102 1870 .26 11 6040

06911900 DRAGOON CREEK NEAR BURLINGAME, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	51.3 447 1986 .000 1965	50.4 621 1999 .000 1967	32.2 186 1974 .000 1967	27.9 182 1962 .000 1977	52.4 249 1985 .000 1992	96.8 511 1973 .000 1967	116 600 1983 .000 1977	139 1008 1995 1.21 1989	146 856 1977 .002 1989	54.1 652 1993 .009 1991	15.5 186 1968 .000 1966	37.4 339 1973 .000 1966
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	AR YEAR	FC	OR 2001 WA	TER YEAR		WATER YE	ARS 1961	- 2001
	MEAN FANNUAL M ANNUAL ME			16.3			59.2			68.2 175 5.54		1999 1989
	DAILY ME			954 .00	Feb 25 Jul 24		2060	Jun 21 Oct 1		13400		29 1982 14 1962
ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE			.00	Aug 4		.00 3300 14.44	Oct 1 Mar 16 Mar 16		.00 34400 22.80	May 2	14 1962 29 1982 17 1995	
INSTANT	TANEOUS LO	OW FLOW		11840			.00	Oct 1		.00		years
10 PERC 50 PERC	CENT EXCER	EDS EDS		35 2.0			74 5.1			93 8.0		
90 PERC	CENT EXCER	SUS		.00			.00			.00		

e Estimated



06911900 DRAGOON CREEK NEAR BURLINGAME, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. -- Water years 1976 to June 1990, 2000 to current year.

 ${\tt REMARKS.--Unpublished \ records \ of \ intermittent \ sediment \ samples \ are \ available \ on \ the \ World \ Wide \ Web \ at \ http://ks.water.usgs.gov/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linea$ nwis. Sediment samples are collected only at selected flow conditions.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDEI (MG/L) (80154)		SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
FEB							
13 MAR	1520	11	641	1.5	39	1.2	
15 MAY	1315	1870	237	8.0	3150	15900	
10	1145	1190	276	18.5	2470	7930	
21	1120	47	497	20.0	46	5.8	
JUN							
20	1130	2900	164	18.5	3030	23700	98
JUL							
17	1315	2.5	578	30.0	21	.15	

06912490 POMONA LAKE NEAR QUENEMO, KS

LOCATION.--Lat 38°38'51", long 95°33'50", in NE $^1/_4$ NE $^1/_4$ NE $^1/_4$ sec.19, T.16 S., R.17 E., Osage County, Hydrologic Unit 10290101, in control tower at dam on Hundred and Ten Mile Creek, 5.0 mi northwest of Quenemo, and at mile 7.9.

DRAINAGE AREA. -- 322 mi².

PERIOD OF RECORD.--April 1964 to current year. Prior to October 1971, published as "Pomona Reservoir."

GAGE.--Water-stage recorder. Datum of gage is sea level (U.S. Army Corps of Engineers bench mark).

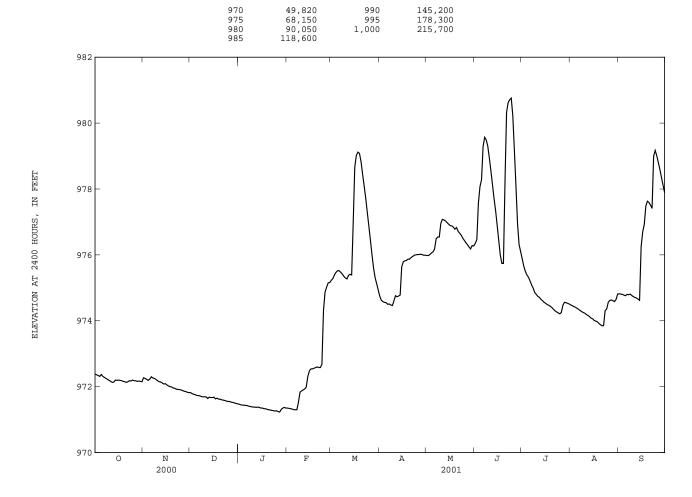
REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Oct. 18, 1963. Conservation pool elevation was first reached on June 4, 1965. Total capacity, 498,500 acre-ft, consisting of the following: Sedimentation, 25,610 acre-ft below elevation 960.5 ft; conservation pool, 41,030 acre-ft between elevations 960.5 ft and 974.0 ft; flood-control pool, 176,500 acre-ft between elevations 974.0 ft and 1,003.0 ft; and surcharge pool, 255,400 acre-ft between elevations 1,003.0 ft and 1,025.4 ft. Reservoir is used for flood control, conservation, and recreation. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 998.40 ft June 12, 1995, contents, 203,200 acre-ft; minimum elevation since conservation pool was first filled, 969.60 ft Mar. 29, 30, 1967, contents, 54,260 acre-ft, from capacity table then in use.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 980.78 ft June 25, contents, 93,800 acre-ft; minimum elevation, 971.22 ft Jan. 27, contents, 54,000 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet) (Computed by U.S. Army Corps of Engineers on basis of resurvey made in 1989)

Note.--Effective date of new capacity table Apr. 1, 1990.



06912490 POMONA LAKE NEAR QUENEMO, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	972.38 972.36 972.34 972.31 972.37	972.27 972.25 972.22 972.19 972.23	971.82 971.79 971.77 971.76 971.73	971.47 971.45 971.44 971.44 971.43	971.35 971.34 971.33 971.32 971.30	975.23 975.28 975.39 975.47 975.52	974.74 974.62 974.58 974.56 974.55	975.98 975.98 976.01 976.06 976.09	976.35 976.46 977.57 978.07 978.28	975.88 975.66 975.50 975.39 975.32	974.48 974.46 974.43 974.41 974.38	974.82 974.81 974.80 974.78 974.76
6 7 8 9 10	972.31 972.28 972.25 972.22 972.19	972.30 972.26 972.25 972.22 972.18	971.73 971.72 971.70 971.69 971.69	971.43 971.41 971.40 971.39 971.38	971.30 971.30 971.53 971.83 971.87	975.52 975.47 975.42 975.35 975.30	974.50 974.51 974.48 974.46 974.60	976.18 976.49 976.54 976.54	979.29 979.57 979.49 979.30 978.94	975.21 975.09 974.99 974.86 974.80	974.35 974.31 974.28 974.25 974.23	974.80 974.79 974.81 974.77 974.73
11 12 13 14 15	972.16 972.13 972.14 972.20 972.19	972.15 972.14 972.11 972.08 972.09	971.69 971.64 971.68 971.67	971.38 971.37 971.38 971.37 971.35	971.90 971.93 971.99 972.31 972.48	975.27 975.38 975.41 975.39 976.98	974.76 974.73 974.75 974.78 975.64	977.08 977.06 977.03 976.98 976.93	978.55 978.13 977.71 977.34 976.90	974.74 974.71 974.65 974.61 974.56	974.19 974.16 974.13 974.08 974.06	974.71 974.69 974.66 974.62 976.25
16 17 18 19 20	972.20 972.19 972.18 972.16 972.15	972.05 972.02 972.00 971.99 971.96	971.68 971.63 971.65 971.62 971.62	971.35 971.33 971.33 971.31 971.30	972.54 972.54 972.56 972.58 972.60	978.67 979.02 979.12 979.08 978.83	975.79 975.82 975.83 975.87	976.89 976.88 976.84 976.78	976.44 975.99 975.74 975.74	974.53 974.49 974.47 974.44 974.40	974.01 973.99 973.97 973.92 973.88	976.70 976.92 977.48 977.63 977.59
21 22 23 24 25	972.13 972.15 972.18 972.17 972.20	971.95 971.92 971.92 971.91 971.90	971.60 971.59 971.58 971.56 971.55	971.29 971.28 971.27 971.26 971.27	972.58 972.58 972.68 974.31 974.87	978.45 978.09 977.72 977.29 976.87	975.92 975.95 975.99 976.00 976.01	976.72 976.66 976.60 976.51 976.44	980.32 980.62 980.71 980.76 980.22	974.35 974.30 974.27 974.24 974.21	973.85 973.85 974.31 974.36 974.56	977.51 977.41 979.00 979.17 979.01
26 27 28 29 30 31	972.18 972.18 972.16 972.17 972.16 972.15	971.88 971.86 971.85 971.83 971.82	971.55 971.53 971.52 971.51 971.49 971.48	971.24 971.23 971.31 971.35 971.37 971.35	975.02 975.15 975.16 	976.44 976.01 975.60 975.31 975.12 974.93	976.01 976.02 976.01 975.99 975.99	976.37 976.31 976.24 976.18 976.28 976.27	979.17 978.09 976.96 976.31 976.10	974.25 974.47 974.56 974.55 974.53	974.62 974.63 974.61 974.58 974.65 974.81	978.80 978.59 978.35 978.12 977.89
MEAN MAX MIN (+) (#)	972.21 972.38 972.13 57,300 -950	972.06 972.30 971.82 56,100 -1,200	971.64 971.82 971.48 54,900 -1,200	971.35 971.47 971.23 54,500 -400	972.51 975.16 971.30 68,800 +14,300	976.42 979.12 974.93 67,900 -900	975.31 976.02 974.46 72,200 +4,300	976.54 977.08 975.98 73,400 +1,200	978.11 980.76 975.74 72,700 -700	974.73 975.88 974.21 66,200 -6,500	974.28 974.81 973.85 67,400 +1,200	976.43 979.17 974.62 80,300 +12,900

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

06912500 HUNDRED AND TEN MILE CREEK NEAR QUENEMO, KS

LOCATION.--Lat $38^\circ38^\circ41^\circ$, long $95^\circ33^\circ34^\circ$, in NE $^1/_4$ NW $^1/_4$ SW $^1/_4$ sec.20, T.16 S., R.17 E., Osage County, Hydrologic Unit 10290101, on left bank 800 ft downstream from outlet works of Pomona Dam, 4.5 mi northwest of Quenemo, and at mile 7.7.

DRAINAGE AREA. -- 322 mi².

PERIOD OF RECORD.--September 1939 to current year. Prior to October 1941, published as "Dragoon Creek."

REVISED RECORDS. -- WSP 1116: 1942.

GAGE.--Water-stage recorder. Datum of gage is 919.05 ft above sea level (U.S. Army Corps of Engineers bench mark). See WSP 1919 for history of changes prior to Apr. 11, 1963.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow completely regulated since 1964 by Pomona Lake (station 06912490), 0.2 mi upstream. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1919, that of July 11, 1951, from information by local resident.

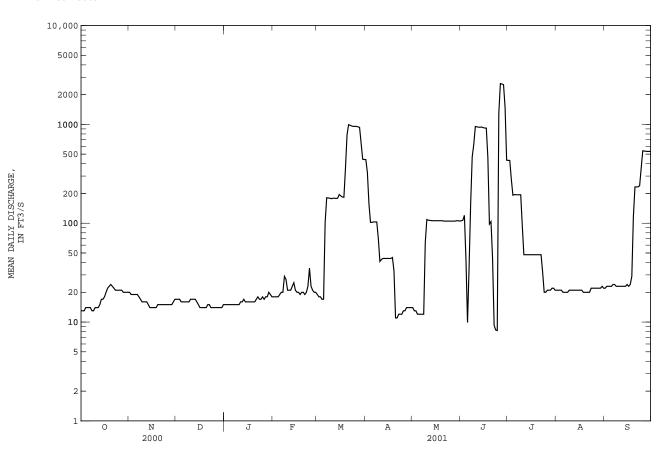
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAILY MEAN VALUES DAY OCT NOV DEC FEB MAR APR MAY JUN AUG SEP JAN JUL 9.9 e36 e29 e27 17 23 e24 e29 e104 e44 8.3 8.2 e35 e23 2.7 ------17.7 MEAN 16.1 15.3 16.4 21.4 69.1 80.4 21.0 MAX MIN AC-FT

06912500 HUNDRED AND TEN MILE CREEK NEAR QUENEMO, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	133 1196 1942 .000 1940	139 1520 1999 .000 1940	121 1113 1999 .000 1940	87.1 506 1962 .000 1940	111 847 1973 .000 1940	202 984 1987 .000 1940	282 2476 1944 .033 1954	276 1645 1999 5.04 1954	373 2141 1982 1.22 1953	291 3096 1951 .023 1954	91.6 1296 1993 .000 1940	84.8 1331 1951 .000 1953
SUMMARY	STATIST:	ICS	FOR 2	2000 CALEN	DAR YEAR	FC	OR 2001 WAT	TER YEAR		WATER YEA	RS 1940	- 2001
HIGHEST	SUMMARY STATISTICS ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN			67.1			136			183 554 3.65		1999 1956
				493	Jan 1		2590	Jun 26		27700	Jul 1	1951
LOWEST	DAILY ME	AN		9.7	Jul 19		8.2	Jun 24		.00	Oct	1 1939
		Y MINIMUM		13	Sep 27		12	Apr 20		.00	Oct	1 1939
	I PEAK FLO						2610	Jun 26		38600		1951
							11.98	Jun 26		28.47	Jul 1	L1 1951
	AXIMUM PEAK STAGE NSTANTANEOUS LOW FLOW						7.6	Jun 23		.00	some	e years
	RUNOFF (- ,		48710			98300			132400		
	CENT EXCE			190			433			433		
	CENT EXCE			22			21			21		
90 PERC	CENT EXCE	EDS		14			14			1.1		



06913000 MARAIS DES CYGNES RIVER NEAR POMONA, KS

LOCATION.--Lat $38^\circ35^\circ03^\circ$, long $95^\circ27^\circ12^\circ$, in SE $^1/_4$ NE $^1/_4$ SE $^1/_4$ sec.7, T.17 S., R.18 E., Franklin County, Hydrologic Unit 10290101, on right bank at downstream side of county highway bridge, 1.5 mi south of Pomona, 4.7 mi upstream from Miller Dam, 5.7 mi downstream from Hundred and Ten Mile Creek, and at mile 418.1.

DRAINAGE AREA. -- 1,040 mi².

PERIOD OF RECORD.--July 1922 to February 1938, October 1968 to current year. Prior to October 1968, published as "near Quenemo." REVISED RECORDS.--WSP 1310: 1924(M), 1929, 1931(M), 1934, 1935(M).

GAGE.--Water-stage recorder. Datum of gage is 893.74 ft above sea level. July 1922 to February 1938, nonrecording gage 1.7 mi upstream at datum 891.36 ft above sea level (levels by U.S. Army Corps of Engineers).

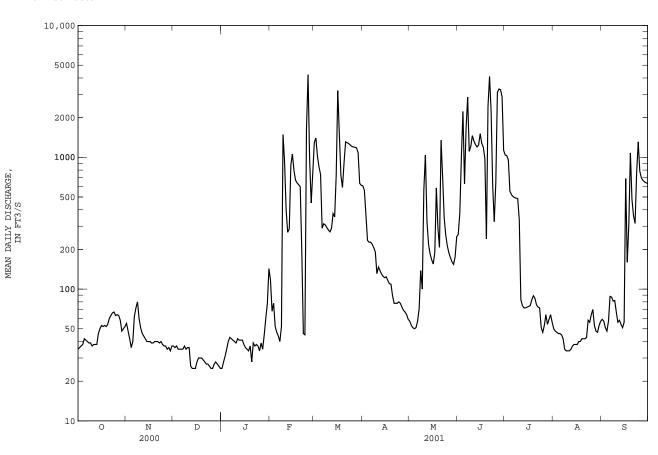
REMARKS.--Records good except those for esimated daily discharges, which are poor. Flow regulated since 1973 by Melvern Lake (station 06910997) and since 1964 by Pomona Lake (station 06912490). Diversions upstream from station for irrigation. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DATLY MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP e28 12 e25 73 e25 e25 52 e28 75 e30 e30 e30 e29 e28 e27 e27 e26 e25 e25 e27 e28 e27 e26 e25 MEAN 48.8 44.3 30.1 42.6 45.2 MAX MIN

06913000 MARAIS DES CYGNES RIVER NEAR POMONA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	399 4204 1986 .29 1938	616 6256 1999 1.00 1938	451 3275 1999 .87 1938	274 1342 1973 1.00 1938	426 2224 1973 1.32 1938	631 3772 1973 1.87 1934	943 3722 1984 8.00 1936	1023 4717 1999 59.3 2000	1365 5587 1982 8.93 1936	629 3206 1969 .42 1936	237 2807 1993 .000 1934	219 1436 1973 .87 1931
SUMMARY	STATIST	ICS	FOR 2	2000 CALEI	NDAR YEAR	FC	OR 2001 WAT	TER YEAR		WATER YEA	RS 1923	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT	ANNUAL ME ANNUAL ME DAILY ME SEVEN-DAY PEAK FLO PEAK STA ANEOUS LO	EAN EAN AN Y MINIMUM DW AGE DW FLOW		212 2740 25 26	Feb 26 Dec 13 Dec 25		358 4240 25 26 5420 15.54	Feb 25 Dec 13 Dec 25 Feb 25 Feb 25 Jan 20		604 2092 55.6 40600 .00 69400 38.38 .00	Jul 2 Jul 1 Nov 1 Nov 1	1999 1934 2 1998 27 1926 6 1934 7 1928 7 1928 7 years
10 PERC 50 PERC	RUNOFF (A ENT EXCENT ENT EXCENTENTE	EDS EDS		154300 859 57 35			259500 1150 67 35			437800 1700 77 5.0	_	



Discharge

06913500 MARAIS DES CYGNES RIVER NEAR OTTAWA, KS

LOCATION.--Lat $38^{\circ}37^{\circ}07^{\circ}$, long $95^{\circ}16^{\circ}04^{\circ}$, in NW $^{1}/_{4}$ SW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.36, T.16 S., R.19 E., Franklin County, Hydrologic Unit 10290101, on right bank at downstream side of Main Street Bridge, on U.S. Highway 59, 1.0 mi downstream of Eightmile Creek, and at mile 398.0.

DRAINAGE AREA. -- 1,250 mi², approximately.

PERIOD OF RECORD.--August 1902 to October 1905, October 1918 to current year. Published as Osage River at Ottawa 1902-05, and as Osage River near Ottawa 1918-47.

REVISED RECORDS.--WSP 1006: 1923, 1927, 1929. WSP 1440: 1904-05, 1922, 1929(M), 1935, 1941-43, 1944-45(M), drainage area.

GAGE.--Water-stage recorder. Datum of gage is 857.68 ft above sea level. Aug. 26, 1902, to Oct. 31, 1905, nonrecording gages at Main Street Bridge in Ottawa at different datums. Oct. 27, 1918, to Sept. 4, 1962, water-stage recorder at Seventh Street Bridge, 0.9 mi downstream at datum 0.47 ft higher. Sept. 5, 1962, to Aug. 8, 1971, water-stage recorder at sewage disposal plant at datum 857.68 ft. Aug. 9, 1971, to July 23, 1987, water-stage recorder outside sewage disposal plant at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since 1973 by Melvern Lake (station 06910997) and since 1964 by Pomona Lake (station 06912490). Many small diversions upstream from station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of 1951 is the highest known since Ottawa was settled (about 1864) according to information reported in "Climate of Kansas - 1948." Flood of June 13 or 14, 1844, reached a stage of about 1.5 ft lower than that in 1951 according to same information.

Discharge

Gage height

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s and maximum (*):

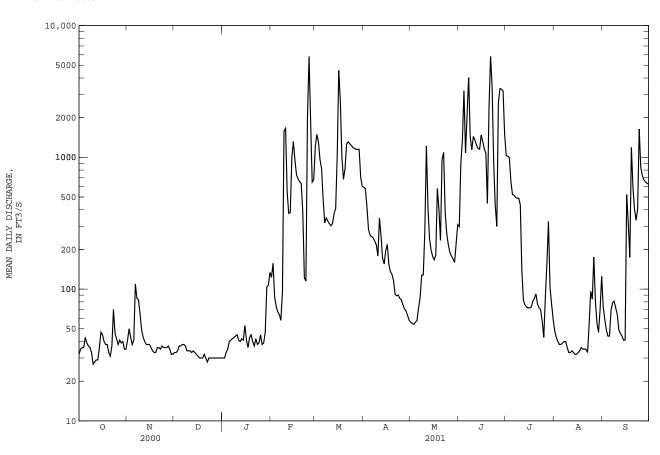
Gage height

Date	Tin	ne	(ft ³ /s)	ومع	(ft)		Date	Tim	ie	(ft ³ /s)	ougo	(ft)
Jun 21	140	00	*6,500	*	19.83		No peal	greater	than bas	se discharge		
		DISCHA	RGE, CUBIC	FEET PE		WATER YE Y MEAN VA		R 2000 TO) SEPTEMBI	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	41	33	e30	123	1210	592	56	298	1030	48	73
2	35	50	33	e30	157	1490	579	55	896	1020	43	59
3	36	43	34	e33	87	1310	419	54	1350	999	40	49
4	36	38	37	e35	74	960	284	56	3200	657	38	44
5	43	41	37	e40	67	823	256	58	1080	522	38	44
6	39	109	38	e41	64	482	250	72	2110	516	39	69
7	37	85	38	e42	58	318	245	87	4030	496	40	79
8	36	83	37	e43	95	347	231	128	1440	490	40	81
9	33	65	34	e44	1580	328	216	128	1140	490	36	72
10	27	49	34	45	1660	313	179	277	1440	436	33	64
11	28	43	e34	41	551	302	346	1220	1350	138	33	49
12	29	40	e33	40	375	315	253	413	1240	82	34	46
13	29	38	e34	42	381	375	171	241	1170	76	33	44
14	36	38	e33	41	993	407	155	197	1150	73	32	41
15	47	38	e32	53	1320	1030	196	177	1480	72	32	41
16	45	36	e31	41	945	4570	218	167	1320	72	33	522
17	40	34	e30	36	734	2650	154	182	1160	73	34	321
18	38	33	e30	43	686	1000	136	579	1070	81	36	174
19	38	33	e30	45	653	682	129	404	448	85	35	1190
20	33	36	e32	e40	633	821	116	234	2370	92	35	589
21	31	36	e30	37	386	1260	91	963	5830	77	35	404
22	37	35	e28	42	122	1310	89	1090	3440	72	33	333
23	70	37	e30	38	115	1270	90	378	912	70	54	405
24	46	36	e30	39	2010	1230	85	264	428	57	96	1640
25	42	36	e30	45	5820	1190	83	217	299	43	84	839
26 27 28 29 30 31	38 41 39 40 35 35	36 37 35 32 32	e30 e30 e30 e30 e30 e30	38 39 47 104 107 134	1900 650 676 	1170 1150 1150 1150 705 601	76 71 68 63 58	190 178 170 159 221 308	2590 3320 3290 3190 1490	86 156 326 103 77 59	175 81 55 47 70 125	727 675 651 635 624
MEAN	37.8	44.2	32.3	47.6	818	1030	197	288	1818	278	51.2	353
MAX	70	109	38	134	5820	4570	592	1220	5830	1030	175	1640
MIN	27	32	28	30	58	302	58	54	298	43	32	41
AC-FT	2320	2630	1990	2930	45450	63310	11700	17700	108200	17110	3150	20990

06913500 MARAIS DES CYGNES RIVER NEAR OTTAWA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	526 6546 1942 .032 1940	580 6913 1999 .33 1940	406 3820 1945 .065 1940	302 2011 1941 .23 1940	427 2578 1949 1.14 1940	768 4422 1973 1.88 1956	1126 8859 1944 9.52 1956	1132 5170 1904 51.6 1965	1478 6143 1904 7.87 1936	853 13580 1951 .19 1940	335 3683 1950 .52 1936	415 4581 1951 .000 1939
SUMMARY	STATIST	ICS	FOR 2	2000 CALE	NDAR YEAR	FC	OR 2001 W	NATER YEAR		WATER YE	ARS 1903	- 2001
HIGHEST	SUMMARY STATISTICS ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN			244			411			699 2332 26.0		1999 1956
	GHEST ANNUAL MEAN WEST ANNUAL MEAN GHEST DAILY MEAN			3230	Feb 26		5830	Jun 21		134000	Jul	12 1951
LOWEST	DAILY MEA	AN		27	Oct 10		27	Oct 10		.00	Jun	27 1920
		Y MINIMUM		30	Dec 21		30	Dec 21		.00	Jul	1 1933
	PEAK FLO						6500	Jun 21		142000		11 1951
	PEAK STA						19.8			42.50		11 1951
	NSTANTANEOUS LOW FLOW NUAL RUNOFF (AC-FT)			176000			26	Oct 10		.00	а	t times
				176900			297400			506600 1650		
	ENT EXCEI			971 52			1190 77			96		
	ENT EXCE			33			33			4.0		



06914000 POTTAWATOMIE CREEK NEAR GARNETT, KS

LOCATION.--Lat $38^{\circ}20^{\circ}01^{\circ}$, long $95^{\circ}14^{\circ}55^{\circ}$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.6, T.20 S., R.20 E., Anderson County, Hydrologic Unit 10290101, on right bank at upstream side of bridge on U.S. Highway 59, 0.6 mi downstream from confluence of North Pottawatomie and Cedar Creeks, 0.2 mi upstream from Atchison, Topeka and Santa Fe Railway Co. bridge, 4.0 mi north of Garnett, and at mile 40.7.

DRAINAGE AREA. -- 334 mi².

PERIOD OF RECORD. -- October 1939 to September 2001 (discontinued).

REVISED RECORDS.--WSP 1390: 1940, 1941(M), 1945, 1947(M), 1949-50.

Discharge

GAGE.--Water-stage recorder. Datum of gage is 873.23 ft above sea level. See WSP 1919 for history of changes prior to May 16, 1958.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1858, that of Sept. 13, 1961, from information by local newspaper.

Gage height

Discharge

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and maximum (*):

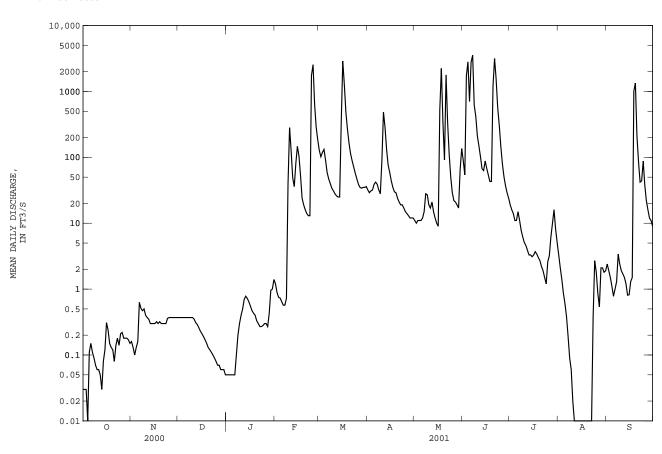
Gage height

Date	Time		(ft ³ /s)	- Cu	(ft)		Date	Time	ė (ft ³ /s)	ومع	(ft)
Jun 6	2215		*5,420		*24.88		No peak	greater	than base	discharge	•	
		DISCHAR	GE, CUBIC	FEET P		WATER YEAR Y MEAN VALU		2000 TO	SEPTEMBER	2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.03 .03 .03 .01	.16 .13 .10 .13	. 37 . 37 . 37 . 37 . 37	e.05 e.05 e.05 e.05 .05	1.2 .88 .75 .73 .64	127 102 119 132 90	32 29 31 32 39	11 10 11 11	89 54 1750 2810 703	19 16 14 11	3.3 2.1 1.4 .86 .60	2.4 1.9 1.5 1.1
6 7 8 9 10	.15 .11 .09 .07	.63 .51 .47 .50	.37 .37 .37 .37	e.05 e.10 e.20 e.30 e.40	.57 .57 .73 39 283	59 47 40 34 31	42 39 32 28 89	12 15 28 27 19	2790 3540 622 418 212	15 11 7.8 6.2 5.1	.38 .19 .09 .06	1.0 1.3 3.4 2.4 1.9
11 12 13 14 15	.06 .05 .03 .08	.37 .35 .30 .30	e.35 e.31 e.29 e.26 e.23	e.50 e.70 .78 .72 .64	125 49 36 81 147	28 26 25 25 328	486 285 132 76 59	17 21 15 12	149 102 67 63 88	4.6 3.9 3.3 3.3 3.1	.00 .00 .00	1.7 1.5 1.2 .81
16 17 18 19 20	.31 .24 .15 .13	.30 .32 .30 .32 .30	e.21 e.19 e.17 e.15 e.13	.55 .47 .43 e.40 e.33	104 53 24 19 16	2890 1260 479 265 163	44 35 30 29 24	9.0 525 2240 340 91	e68 e54 e43 e43 e1190	3.3 3.7 3.4 3.0 2.7	.00 .00 .00	1.3 1.5 1010 1340 209
21 22 23 24 25	.08 .14 .18 .14	.30 .30 .30 .36	e.12 e.11 e.10 e.09 e.08	e.30 e.27 e.27 e.28 .30	14 13 13 1760 2540	113 88 71 57 47	21 19 19 17 15	1780 339 111 50 29	e3170 e1550 e565 e308 e147	2.2 1.9 1.5 1.2 2.6	.00 .00 .38 2.7 1.8	86 42 44 88 38
26 27 28 29 30 31	.22 .18 .18 .18 .17	.37 .37 .37 .37 .37	e.07 e.07 e.06 e.06 e.06	.30 .27 .43 .96 1.0	634 287 184 	39 35 34 35 35 36	14 13 12 12 12	22 21 e19 e17 e65 136	80 51 37 29 24	3.2 6.2 9.9 16 8.2 5.1	.86 .54 2.1 2.1 1.8 1.9	22 16 12 11 9.0
MEAN MAX MIN MED AC-FT	.12 .31 .01 .12 7.6	.33 .63 .10 .32	.22 .37 .05 .21	.41 1.4 .05 .30 25	230 2540 .57 30 12750	221 2890 25 57 13610	58.2 486 12 30 3470	194 2240 9.0 21 11950	694 3540 24 124 41290	6.72 19 1.2 4.6 413	.75 3.3 .00 .19 46	98.5 1340 .78 2.4 5860

06914000 POTTAWATOMIE CREEK NEAR GARNETT, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	236 1897 1999 .000 1940	191 1795 1999 .000 1940	133 853 1993 .000 1940	118 912 1941 .000 1940	168 1620 1985 .000 1957	299 1935 1973 .036 1996	358 1661 1944 .079 1996	302 1506 1961 2.55 2000	411 2269 1967 1.06 1953	240 2824 1951 .062 1980	126 1258 1950 .000 1983	223 2100 1961 .000 1954
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	AR YEAR	FC	OR 2001 WA	TER YEAR		WATER YE	ARS 1940	- 2001
	MEAN 'ANNUAL I ANNUAL MI			40.3			124			234 633 24.5		1999 1956
LOWEST	DAILY ME	AN		1260 .00	Mar 16 Aug 20		3540 .00			33400	Oct	3 1961 1 1939
MAXIMUM	SEVEN-DA PEAK FLO PEAK ST			.00	Aug 20		.00 5420 24.88	Jun 6		.00 57000 35.38	Sep 1	1 1939 .3 1961 .3 1961
INSTANT	ANEOUS LO	OW FLOW		29270			.00 89440			.00	<u>-</u>	years
10 PERC 50 PERC	ENT EXCE ENT EXCE ENT EXCE	EDS EDS		73 1.6 .01			148 2.7	ı		359 20 .10		



06914950 BIG BULL CREEK NEAR EDGERTON, KS

LOCATION.--Lat $38^{\circ}45^{\circ}12^{\circ}$, long $94^{\circ}58^{\circ}34^{\circ}$, in SW $^{1}/_{4}$ NE $^{1}/_{4}$ SW $^{1}/_{4}$ sec.9, T.15 S., R.22 E., Johnson County, Hydrologic Unit 10290102, located on right bank at upstream side of southbound Interstate Highway 35 bridge, 1.5 mi east of Edgerton.

DRAINAGE AREA.--28.7 mi².

PERIOD OF RECORD. -- July 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 925.04 ft above sea level.

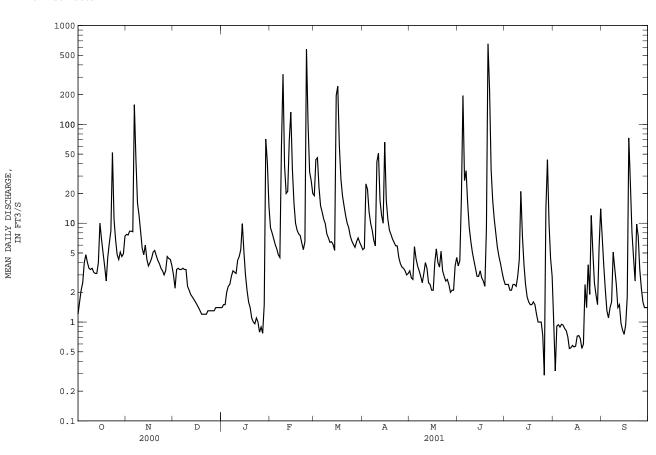
REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP 7.2 3.7 2.1 9.0 e1.4 1.6 2.2 3.4 e1.5 e1.5 e8 2.8 2 7.6 44 5.6 4.2 2.4 .32 3 8.3 e7 46 25 18 2.4 .91 8.3 3.5 6.1 196 5 4.0 8.2 3.4 2.3 5.5 15 13 4.4 27 2.1 .89 1.1 158 4.8 13 10 .95 8.5 6.7 2.9 2.4 4.0 44 3.5 4.5 11 3.3 16 93 1.6 8 3.5 3.4 3.3 60 9.9 2.9 9.1 16 .86 5.1 3.4 12 3.2 321 7.8 5.9 3.5 10 3.5 8.2 e2.3 3.1 38 7.1 42 3.1 5.1 4.3 71 2.4 11 3.2 5.6 e2.1 4.2 20 6.4 51 4.0 4.2 21 .54 1.4 17 3.5 7.4 12 3.1 4.8 e1.9 4.6 21 6.5 3.5 .55 1.5 2.9 13 3.1 6.0 e1.8 5.4 69 6.1 12 2.5 3.8 .58 .97 14 4.0 e1.7 9.9 133 5.3 10 2.4 2.9 .83 196 2.1 1.8 15 10 3.7 e1.6 5.2 35 66 3.3 .57 .75 3.0 2.1 17 2.1 2.8 .72 .73 16 6.9 4.0 e1.5 16 243 94 1.8 17 5.0 4.4 e1.4 10 61 11 1.5 8.5 7.7 6.9 3.7 5.1 e1.3 1.6 28 5.5 2.3 73 18 8.5 1.5 .68 5.3 4.7 1.4 7.8 19 15 1.6 19 2.6 e1.2 4.0 8.9 .54 25 4.5 20 653 e1.2 8.1 3.6 .60 21 6.3 8.4 4 2 e1.2 1.0 6.3 5.4 12 6.4 5.9 5.2 3.3 226 1 2 2.4 4.5 2.6 .96 1.1 3.9 e1.2 10 35 1.0 1.4 22 52 23 3.5 e1.3 6.5 9.0 5.9 2.9 17 1.0 3.8 9.8 7.4 3.3 4.5 3.9 11 7.9 24 11 e1.3 1.0 576 2.6 1.0 1.9 7.4 .79 2.7 12 3.4 25 6.8 102 e1.3 3.3 33 6.1 5.7 5.7 .29 2.2 26 4.8 e1.3 .89 3.6 2 4 5.2 27 4.3 4.6 .77 27 3.5 2.0 4.6 2.5 1.6 e1.3 28 4.4 e1.4 1.5 20 6.5 2.1 3.9 44 1.9 71 29 4.6 4.9 4.3 3.7 e1.4 e1.4 7.1 3.0 2.1 3.7 3.2 2.7 10 1.5 5.7 1.4 30 41 6.4 3.1 4.4 1.4 e1.4 31 7.4 15 5.9 4.5 2.9 14 MEAN 12.1 1.99 6.36 56.0 27.9 13.1 3.28 5.98 71 5.8 MAX 52 158 3.5 576 243 66 653 44 14 73 1 2 1 2 5 3 3.0 75 MTN 3 0 4 5 2 3 29 32 122 202 2620 AC-FT

06914950 BIG BULL CREEK NEAR EDGERTON, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	20.8 107 1999 .34 1996	32.4 139 1999 .88 1996	13.2 38.7 1998 .92 1996	5.19 14.3 1999 .80 1996	21.1 69.0 1997 .74 1996	18.7 59.2 1998 .73 1996	42.8 119 1994 1.32 1996	57.0 246 1995 3.28 2001	42.9 74.9 1996 9.14 1998	8.48 22.6 1998 .85 1997	4.58 18.6 1996 .73 2000	16.4 91.8 1998 .59 1995
SUMMARY	Y STATIST	ICS	FOR 2	2000 CALENI	OAR YEAR	F	OR 2001 WA	TER YEAR		WATER YEA	ARS 1994	- 2001
	MEAN F ANNUAL I ANNUAL M			9.28			15.0			23.5 45.8 8.99		1999 2000
	r DAILY M			746	Jun 20		653	Jun 20		2520		17 1995
	DAILY ME			.34			.29			.00		11 1997
		Y MINIMUM		.48	Jul 9		.60			.08		14 1994
	M PEAK FL						2200	Jun 20		4960 14.54	Oct	4 1998 4 1998
	M PEAK ST. FANEOUS L						10.31			.00		11 1997
	RUNOFF (.			6740			10840	Our 27		17060	DCP .	11 1///
	CENT EXCE			10			21			26		
50 PERG	CENT EXCE	EDS		2.1			3.8			2.9		
90 PERG	CENT EXCE	EDS		.70			1.1			.57		



06914990 LITTLE BULL CREEK NEAR SPRING HILL, KS

LOCATION.--Lat $38^{\circ}45^{\circ}11^{\circ}$, long $94^{\circ}52^{\circ}10^{\circ}$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.16, T.15 S., R.23 E., Johnson County, Hydrologic Unit 10290102, located on right bank at downstream side of county highway bridge, 0.3 mi west of intersection of 207th Street and Clare Road, 4 mi south and 3.2 mi east of Gardner.

DRAINAGE AREA. -- 8.81 mi², approximately.

PERIOD OF RECORD. -- October 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 925.244 ft above sea level.

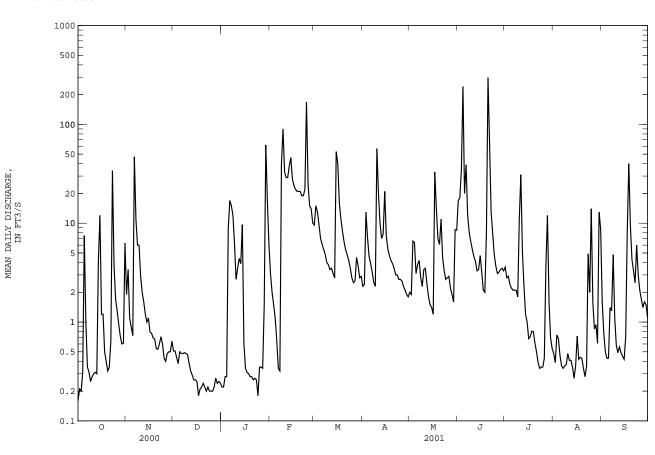
REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES NOV MAR AUG SEP DAY OCT DEC JAN FEB APR MAY JUIN JUL 2.3 17 1 .16 1.9 .51 e.22 3.1 9.6 2.0 3.6 .48 1.6 2 . 21 3.4 1.1 . 22 15 18 .39 .77 . 51 e2.0 1.9 2.8 13 7.2 .20 .44 e.28 13 1.5 .89 .43 4 .31 38 e.28 1.1 9 6 6.4 242 2 4 68 5 7.5 8.8 .73 .50 .65 7.0 4.6 3.1 20 2.2 .46 .43 17 6 7 47 .48 6.1 3.9 3.8 39 2.1 1.4 1.0 .34 .36 .35 3.2 2.1 .48 15 5.4 12 11 .32 4.2 .34 1.3 8 .31 6.0 .49 12 40 4.8 2.5 2.8 2.1 4.8 9 25 6.0 48 6.2 90 4 0 2.3 2 3 6.5 1.8 37 1 1 2.7 2.9 .47 33 57 5.4 10 .28 3.8 3.4 11 .48 .58 11 .30 2.0 .38 3.5 29 3.4 20 3.5 4.6 31 .41 .49 .31 e.32 4.4 29 3.5 5.1 .56 12 1.6 10 2.4 4.1 .41 1.2 7.0 7.8 13 .30 e.29 3.9 38 3.1 1.8 3.3 2.3 .35 .49 4.1 1.2 14 e.26 9.7 46 2.8 1.5 3.4 .27 .45 15 12 1.1 e.26 .61 28 53 21 1.4 4.7 1.0 .36 .42 7.4 . 25 1.2 .72 1.2 .79 24 40 3.2 .71 16 .34 .68 1.2 22 5.5 8.3 .18 e.31 16 33 2.1 .71 .42 e.21 e.22 21 21 4.7 14 7.0 2.0 .81 40 9.5 18 .50 .69 e.30 11 .44 8.3 19 .67 e.28 .43 .40 .80 20 3.9 .32 .54 e.24 e.28 21 6.5 6.1 298 .61 .34 4.3 21 .35 .53 e.22 19 5.4 3.5 11 65 .50 .28 3.3 e.26 e.20 19 4.8 3.0 4.5 13 .39 22 .66 .60 e.27 7.9 .26 4.2 3.0 2.7 3.3 4.9 23 34 .71 e.22 22 .34 6.0 .60 e.20 4.8 3.0 24 3.8 168 .35 25 .43 e.20 25 2.8 2.7 2.8 3.7 .35 14 2.1 1.7 .35 26 1.3 .40 e.20 .35 15 2.5 2.6 2.9 3.1 .43 1.6 1.7 27 .95 .48 e.22 .34 2.3 2.2 3.2 3.7 .85 28 .72 .60 .50 e.27 1.5 10 4.5 3.7 2.1 1.9 1.9 3.4 3.5 12 94 1.6 1.5 29 .50 e.24 1.6 62 1.6 .61 30 .64 e.25 17 .69 13 8.7 6.3 6.1 31 e.24 2 9 8.5 .54 MEAN 2.65 3.22 .32 5.64 26.5 8.57 7.18 5.11 28.2 3.16 1.81 3.41 34 .16 168 298 2.0 14 .27 MAX 47 51 62 53 57 33 31 40 .18 .18 2.5 1.8 .34 .42 MIN .32 AC-FT 163 192 19 347 1470 527 427 314 1680 195 111 203

06914990 LITTLE BULL CREEK NEAR SPRING HILL, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	7.42 22.6 1999 .44 1996	10.5 37.5 1999 .54 1996	4.42 10.3 1999 .32 2001	2.62 5.64 2001 .42 1996	10.0 33.2 1997 .63 1996	6.56 20.9 1998 .46 1996	14.1 46.6 1994 .44 1996	20.3 88.4 1995 1.62 2000	18.6 31.8 1996 6.27 2000	2.78 8.63 1998 .42 1994	3.32 11.9 1996 .16 2000	4.28 19.1 1998 .44 1995
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	DAR YEAR	FC	R 2001 WA	TER YEAR		WATER YEA	ARS 1994	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT	ANNUAL MANNUAL MANNUAL MAILY MEA SEVEN-DAY PEAK FLOW PEAK STANDOUS LOW	EAN EAN AN Y MINIMUM DW AGE DW FLOW		2.24 134 .00 .01	Jun 20 Aug 30 Sep 4		7.81 298 .16 .21 1170 13.65 .05	Jun 20 Oct 1 Dec 21 Jun 20 Jun 20		8.70 12.8 2.21 930 .00 .01 1670 15.70	Aug 3 Sep Jun 1 Jun 1	1999 2000 7 1995 0 2000 4 2000 6 1997 6 1997 2 2000
10 PERC 50 PERC	RUNOFF (A ENT EXCENT ENT EXCENT ENT EXCENT	EDS EDS		1630 4.0 .60 .18			5650 17 2.1 .30			6300 10 1.6 .31		



06914995 HILLSDALE LAKE NEAR HILLSDALE, KS

LOCATION.--Lat 38°39'36", long 94°53'50", in NE $^1/_4$ SW $^1/_4$ NW $^1/_4$ sec.17, T.16 S., R.23 E., Miami County, Hydrologic Unit 10290102, in control tower at dam on Big Bull Creek, 2.5 mi west of Hillsdale, and at mile 18.2.

DRAINAGE AREA.--144 mi².

PERIOD OF RECORD. -- May 1982 to current year.

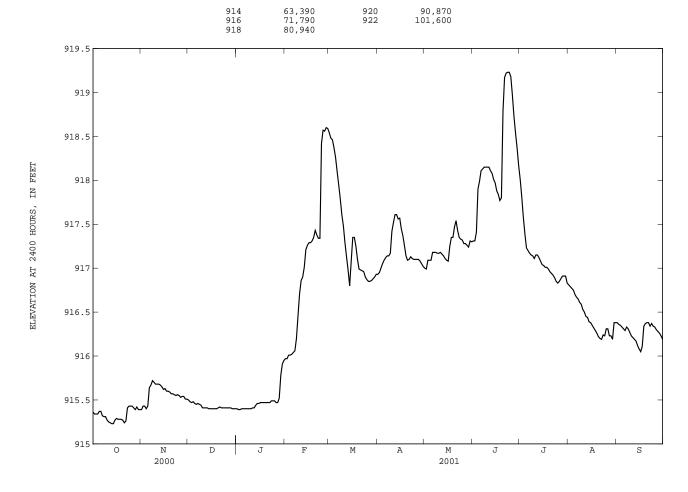
GAGE.--Water-stage recorder. Datum of gage is sea level (U.S. Army Corps of Engineers bench mark).

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Sept. 19, 1981. Conservation pool elevation was first reached on Feb. 23, 1985. Total capacity, 315,600 acre-ft, consisting of the following: Conservation pool, 76,270 acre-ft between elevations 860.0 ft and 917.0 ft; flood-control pool, 83,570 acre-ft between elevations 917.0 ft and 931.0 ft; and surcharge pool, 155,800 acre-ft between elevations 931.0 ft and 948.0 ft. Reservoir is used for flood control, water supply, water-quality control, fish and wildlife, and recreation. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 928.49 ft Oct. 20, 1986, contents, 141,900 acre-ft; minimum elevation since conservation pool first filled, 904.91 ft Dec. 14, 1987, contents, 33,740 acre-ft.

EXTREMES FOR CURRENT OF RECORD.--Maximum elevation, 919.23 ft June 22-25, contents, 86,960 acre-ft; minimum elevation, 915.19 ft Dec. 12, contents, 68,300 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-feet) (Based on survey made in 1969 by U.S. Army Corps of Engineers)



06914995 HILLSDALE LAKE NEAR HILLSDALE, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	915.36 915.34 915.34 915.34	915.39 915.43 915.43 915.40 915.43	915.50 915.48 915.47 915.48 915.46	915.40 915.39 915.39 915.40 915.40	915.97 915.97 916.01 916.01 916.02	918.54 918.48 918.46 918.37 918.26	916.93 916.95 917.00 917.05 917.09	917.00 916.99 917.09 917.09 917.09	917.31 917.31 917.41 917.90 917.99	918.01 917.81 917.58 917.39 917.23	916.81 916.79 916.77 916.75 916.70	916.38 916.36 916.35 916.33 916.31
6	915.37	915.64	915.45	915.40	916.04	918.10	917.12	917.18	918.11	917.20	916.67	916.29
7	915.32	915.67	915.46	915.40	916.06	917.95	917.14	917.18	918.13	917.17	916.65	916.33
8	915.31	915.72	915.45	915.40	916.20	917.79	917.14	917.18	918.15	917.15	916.61	916.31
9	915.31	915.70	915.44	915.40	916.46	917.61	917.17	917.17	918.15	917.14	916.59	916.27
10	915.27	915.68	e915.41	915.40	916.71	917.48	917.42	917.17	918.15	917.11	916.53	916.23
11	915.25	915.68	e915.41	915.41	916.86	917.29	917.52	917.18	918.15	917.15	916.50	916.21
12	915.24	915.68	e915.41	915.41	916.90	917.13	917.61	917.16	918.11	917.15	916.45	916.19
13	915.23	915.67	e915.41	915.44	917.01	916.98	917.61	917.14	918.08	917.12	916.44	916.17
14	915.23	915.65	e915.40	915.46	917.21	916.80	917.56	917.11	918.01	917.08	916.39	916.12
15	915.27	915.62	e915.40	915.46	917.26	917.08	917.57	917.09	917.97	917.04	916.38	916.08
16	915.29	915.63	e915.40	915.47	917.29	917.35	917.45	917.08	917.88	917.03	916.35	916.05
17	915.28	915.60	e915.40	915.47	917.29	917.35	917.37	917.25	917.84	917.01	916.32	916.11
18	915.28	915.60	915.40	915.47	917.31	917.25	917.26	917.35	917.77	917.01	916.29	916.34
19	915.28	915.59	915.40	915.47	917.35	917.10	917.14	917.35	917.80	916.99	916.26	916.37
20	915.27	915.57	915.41	915.47	917.43	916.99	917.09	917.47	918.79	916.96	916.22	916.38
21	915.24	915.57	915.42	915.47	917.38	916.98	917.10	917.54	919.17	916.94	916.20	916.38
22	915.26	915.56	915.41	915.47	917.34	916.97	917.13	917.43	919.22	916.92	916.19	916.34
23	915.41	915.55	915.41	915.49	917.34	916.96	917.11	917.35	919.23	916.89	916.24	916.37
24	915.43	915.56	915.41	915.49	918.42	916.90	917.10	917.33	919.23	916.85	916.23	916.34
25	915.43	915.55	915.41	915.49	918.57	916.87	917.10	917.32	919.18	916.83	916.31	916.33
26 27 28 29 30 31	915.43 915.41 915.39 915.42 915.39 915.39	915.53 915.54 915.54 915.51 915.51	915.41 915.41 915.41 915.40 915.40	915.47 915.47 915.52 915.78 915.91 915.95	918.56 918.60 918.59 	916.85 916.85 916.86 916.88 916.90 916.93	917.10 917.10 917.08 917.05 917.02	917.28 917.28 917.26 917.24 917.31 917.30	918.97 918.73 918.54 918.37 918.17	916.85 916.88 916.91 916.91 916.91 916.83	916.31 916.23 916.23 916.19 916.38 916.38	916.30 916.28 916.26 916.23 916.19
MEAN	915.33	915.57	915.42	915.48	917.08	917.36	917.20	917.22	918.26	917.10	916.43	916.27
MAX	915.43	915.72	915.50	915.95	918.60	918.54	917.61	917.54	919.23	918.01	916.81	916.38
MIN	915.23	915.39	915.40	915.39	915.97	916.80	916.93	916.99	917.31	916.83	916.19	916.05
(+)	69,150	69,660	69,190	71,570	83,790	75,950	76,360	77,650	81,760	75,490	73,470	72,630
(#)	+40	+510	-470	+2,380	+12,220	-7,840	+410	+1,290	+4,110	-6,270	-2,020	-840

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

e Estimated

06915000 BIG BULL CREEK NEAR HILLSDALE, KS

LOCATION.--Lat 38°38'12", long 94°53'29", in SW $^1/_4$ SW $^1/_4$ SE $^1/_4$ sec.20, T.16 S., R.23 E., Miami County, Hydrologic Unit 10290102, on right bank 1.0 mi upstream from Tenmile Creek, 3.0 mi southwest of Hillsdale, and at mile 16.2.

DRAINAGE AREA. -- 147 mi².

AC-FT

PERIOD OF RECORD.--July 1958 to current year. Records for 1949 to 1953 published in WSP 1146, 1176, 1210, 1240, and 1280 have been found to be unreliable and should not be used.

REVISED RECORDS. -- WSP 1919: 1958. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 854.49 ft above sea level. Prior to July 29, 1958, water-stage recorder and nonrecording gage operated 1,850 ft downstream at datum 6.00 ft lower. All records from this site were later discredited.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow completely regulated since 1981 by Hillsdale Lake (station 06914995), 2.0 mi upstream. Satellite telemeter at station.

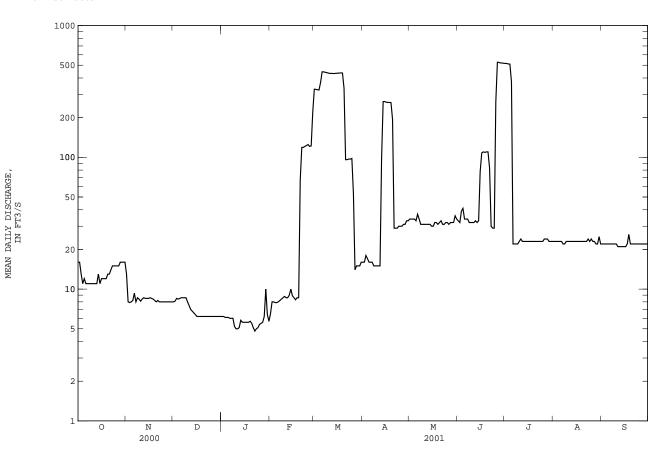
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since 1910, 21.2 ft July 11, 1951, present site and datum, dis-charge, 45,200 ft³/s, on basis of slope-area measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY SEP OCT NOV DEC JAN FEB APR MAY AUG 8.0 e6.2 6.5 8.0 8.1 e6.2 8.0 7 9 8 5 e6 1 8.0 7.9 8.0 8.4 e6.1 8.2 8.5 7.9 9.3 8.6 e6.0 8.0 e34 e6.0 8.2 e8.4 22 8.0 8.6 8.6 8.6 6.0 8.4 8.6 e8.6 8.1 e8.0 5.0 8.8 8.4 e7.5 5.0 8.6 13 11 8.6 5.1 5.8 8.6 432 32 23 21 e7.0 e6.8 8.5 e6.6 8.5 e6.4 5.6 8 9 e434 8.6 e6.2 8.6 e435 12 8.5 8.4 e6.2 e6.2 5.6 5.6 8.3 e436 437 e6.2 8.6 e6.2 8.0 5.5 e110 5.1 8.0 e6.2 4.8 5.0 97 22 8.0 e6.2 e6.2 e123 8.0 e6.2 5.4 8.0 e6.2 5.5 e6.2 e6.2 8 0 5.6 8.0 6.2 8.0 e6.2 8.0 e6.2 6.4 ---5.7 7.01 MEAN 13.1 8.40 5.77 78.7 32.3 97.5 23.0 21.9 46.3 MAX 8.6 MTN 7 9 6.2 4.8 6.5

06915000 BIG BULL CREEK NEAR HILLSDALE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	94.7 773 1974 .000 1964	79.0 612 1962 .000 1964	97.8 688 1987 .000 1964	71.3 408 1993 .000 1964	61.4 389 1982 .18 1981	127 1057 1973 .43 1964	105 368 1987 1.77 1981	140 492 1993 7.90 1965	248 1061 1995 8.23 1959	85.8 744 1984 .011 1980	41.6 730 1993 .000 1975	79.2 1019 1961 .000 1963
SUMMARY	Y STATIST	ICS	FOR 2	2000 CALEN	DAR YEAR	F	OR 2001 WA	TER YEAR		WATER YE	ARS 1959	- 2001
	MEAN FANNUAL I ANNUAL M			28.8			63.0			103 271 12.0		1973 1989
	r daily m			406	Jan 8		527	Jun 26		18000		13 1961
	DAILY ME			1.1	Jun 23		4.8	Jan 22		.00		L1 1959
		Y MINIMUM		3.6	Jun 22		5.2	Jan 20		.00		L1 1959
	M PEAK FL						549	Mar 15		39600		L3 1961
	M PEAK ST						4.42	Mar 15		20.85		L3 1961
	TANEOUS L						4.6	Jan 9		.00	many	years
	RUNOFF (- ,		20900			45600			74320		
	CENT EXCE			56			260			228		
50 PERG	CENT EXCE	EDS		10			22			15		
90 PERG	CENT EXCE	EDS		5.5			6.2			.34		



Discharge

06915800 MARAIS DES CYGNES RIVER AT LA CYGNE, KS

LOCATION.--Lat $38^{\circ}20^{\circ}43^{\circ}$, long $94^{\circ}46^{\circ}19^{\circ}$, in SE $^{1}/_{4}$ SE $^{1}/_{4}$ SE $^{1}/_{4}$ sec.32, T.19 S., R.24 E., Linn County, Hydrologic Unit 10290102, on right bank at upstream side of bridge on Kansas Highway 152, at west edge of La Cygne, and at mile 331.9.

DRAINAGE AREA.--2,669 mi².

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Datum of gage is 776.21 ft above sea level (levels by National Weather Service).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow slightly affected since 1964 by Pomona Lake (station 06912490), since 1973 by Melvern Lake (station 06910997), and by numerous small diversions upstream from station. Satellite telemeter at station.

Discharge

Gage height.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 13, 1951, reached a stage of 36.19 ft, present datum, discharge not determined; information supplied by National Weather Service.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft^3/s and maximum (*):

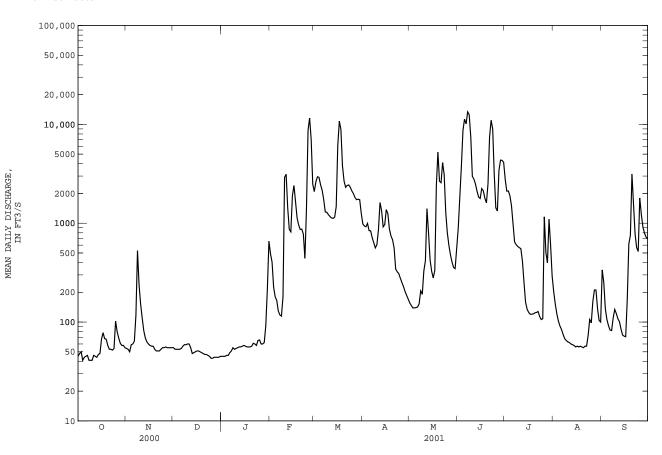
Gage height

Date	Tim	ie	(ft ³ /s)	Gag	(ft)		Date	Tin	ne	(ft ³ /s)		(ft)
Feb 26 Mar 17 Jun 5	123 183 090	0	12,000 11,300 11,800		20.03 19.19 19.79		Jun 7 Jun 22	030 170		*13,900 11,400		22.61 19.26
		DISCHA	ARGE, CUBIC	FEET P		WATER YE LY MEAN VA		R 2000 TO) SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	54	55	e45	491	2090	984	156	899	2780	202	337
2	48	53	53	e45	404	2620	937	147	1850	2110	152	251
3	50	50	53	e45	225	2950	921	139	3800	2120	121	136
4	41	59	53	e46	180	2910	997	139	8670	1900	102	106
5	44	60	53	e46	165	2450	841	140	11300	1510	91	92
6	45	64	54	e49	129	2160	837	142	10100	990	84	83
7	46	118	57	e51	118	1740	714	153	13400	646	75	82
8	41	527	59	e55	115	1300	634	207	12500	606	68	110
9	41	239	59	e53	181	1290	563	191	7430	583	65	134
10	41	152	60	e54	2910	1220	606	329	2980	566	63	122
11	46	110	60	e55	3130	1170	864	417	2790	553	62	108
12	45	82	55	e56	1430	1130	1620	1400	2490	414	60	101
13	44	69	e48	e56	867	1120	1340	799	2110	253	59	85
14	47	63	e49	e57	818	1150	919	424	1840	159	58	74
15	48	60	e50	e58	1900	1470	968	326	1780	135	56	72
16	67	58	e51	e57	2410	6120	1370	280	2240	125	57	71
17	78	57	e51	e56	1650	10800	1250	332	2130	120	56	169
18	68	57	e50	e56	1130	8850	872	2420	1790	120	57	616
19	67	53	e49	e56	959	3810	742	5240	1610	121	56	755
20	58	51	e48	e57	864	2680	681	2660	2500	124	55	3150
21	53	51	e47	61	872	2310	563	2570	7440	125	57	1550
22	53	51	e47	60	775	2410	344	4110	11000	128	57	777
23	52	53	e46	58	440	2440	322	3090	9000	114	73	566
24	54	55	e45	65	1420	2310	309	1290	3110	106	106	518
25	102	55	e43	66	8780	2120	277	802	1430	108	98	1800
26 27 28 29 30 31	80 69 61 58 58	56 55 55 55 55	e43 e44 e44 e44 e44 e45	60 62 92 215 659	11600 7010 2480 	1990 1820 1730 1750 1730 1260	251 228 204 186 171	599 480 405 357 347 561	1330 3420 4350 4320 4140	1160 505 398 1100 604 292	161 211 211 137 104 100	1220 916 796 725 692
MEAN	55.0	85.9	50.3	81.0	1909	2610	717	989	4792	664	94.0	540
MAX	102	527	60	659	11600	10800	1620	5240	13400	2780	211	3150
MIN	41	50	43	45	115	1120	171	139	899	106	55	71
AC-FT	3380	5110	3090	4980	106000	160500	42680	60800	285100	40810	5780	32160

06915800 MARAIS DES CYGNES RIVER AT LA CYGNE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MA	Y	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	2228 12290 1987 49.0 1992	2540 13630 1999 59.6 1996	2071 8038 1993 50.3 2001	1023 4631 1993 56.0 1996	1792 8653 1985 64.2 1996	2471 9746 1987 66.1 1996	2845 6920 1999 83.6 1996	394 1164 199 22 200	0 1 5 2	3517 1020 1995 112 1988	2011 12060 1993 144 1991	928 4120 1993 48.2 1991	1005 4627 1993 52.8 1991
SUMMARY	STATIST	ICS	FOR 2	2000 CALE	NDAR YEAR	F	OR 2001	WATER Y	EAR		WATER Y	ZEARS 1985	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM	ANNUAL MANNUAL MODAILY ME SEVEN-DA PEAK FL PEAK ST	EAN EAN AN Y MINIMUM OW AGE		5680 41 43	Jun 22 Sep 20 Oct 4		1037 13400 41 43 13900 22.		4 4 7 7		2198 5540 313 60600 1.0 1.8 66700 33.4	Oct Nov 19 Nov	1993 1991 4 1998 4 1984 1 1984 4 1998 4 1998
ANNUAL 10 PERC 50 PERC	CANEOUS L RUNOFF (. CENT EXCE CENT EXCE CENT EXCE	AC-FT) EDS EDS		406400 1830 138 48			38 750400 2590 161 50	Oct	10		36 1592000 6010 507 61	Nov	7 1988



Discharge

06916600 MARAIS DES CYGNES RIVER NEAR KANSAS-MISSOURI STATE LINE, KS

LOCATION.--Lat $38^{\circ}13^{\circ}21^{\circ}$, long $94^{\circ}40^{\circ}04^{\circ}$, in NE $^{1}/_{4}$ SE $^{1}/_{4}$ NW $^{1}/_{4}$ sec.16, T.21 S., R.25 E., Linn County, Hydrologic Unit 10290102, on right bank 1.7 mi downstream from Big Sugar Creek, 6.8 mi upstream from Kansas-Missouri State line, and at mile 313.5.

WATER-DISCHARGE RECORDS

DRAINAGE AREA. -- 3,230 mi², approximately.

PERIOD OF RECORD. -- October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 757.06 ft above sea level. Prior to Jan. 15, 1959, nonrecording gage 6.8 mi downstream at datum 15.62 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow slightly affected since 1964 by Pomona Lake (station 06912490), since 1973 by Melvern Lake (station 06910997), and by retention of overbank flow in wildlife refuge ponds, capacity, 5,500 acre-ft, power developments, and by numerous small diversions upstream from station. Satellite telemeter at station.

Discharge

Gage height

EXTREMES OUTSIDE PERIOD OF RECORD.—Flood of July 14, 1951, reached a stage of 41.2 ft, from floodmark, discharge, 148,000 ${\rm ft^3/s}$, from rating curve extended above 110,000 ${\rm ft^3/s}$ on basis of velocity—area study. Flood of Nov. 18, 1928, reached a stage about 3.7 ft lower, discharge, 106,000 ${\rm ft^3/s}$.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft^3/s and maximum (*):

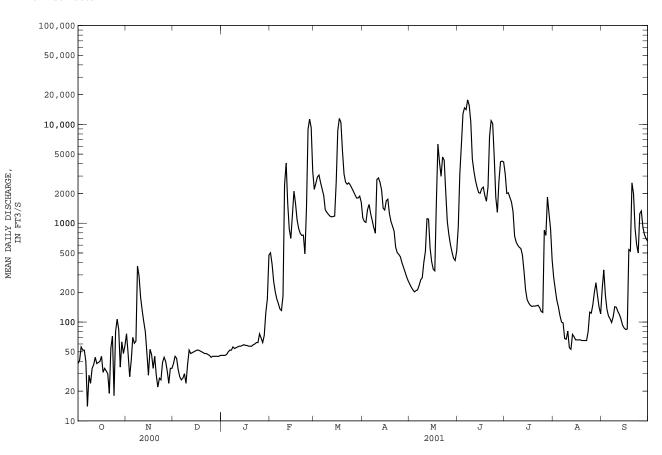
Gage height

Date	Tim	Time (ft^3/s)			(ft)		Date Time		ne	(ft^3/s) (f		(ft)
Feb 26 Mar 17	140 230		12,100 11,800		16.81 16.49		Jun 7 Jun 22	143 210		*18,100 11,500		2.91 6.17
		DISCHA	RGE, CUBIC	FEET PI		WATER YE Y MEAN VA	EAR OCTOBER ALUES	2000 TO) SEPTEMBI	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	38 41 56 52 52	76 48 28 41 70	38 45 43 33 28	e46 e46 46 e47 e50	502 386 260 204 172	2200 2540 2940 3070 2580	1130 1040 1020 1370 1550	242 225 212 202 208	915 3160 6230 12800 14700	3160 2000 2030 1820 1640	281 214 166 142 116	218 337 189 135 115
6 7 8 9 10	40 14 29 24 34	61 64 368 293 177	26 27 30 24 37	e52 e52 e56 e54 e55	154 136 131 184 2450	2220 1910 1370 1290 1230	1250 1070 902 792 2770	212 235 267 281 402	14100 17700 15600 10600 4450	1310 741 644 600 570	100 98 68 67 81	108 99 113 143 141
11 12 13 14 15	37 44 38 39 40	131 101 80 49 29	52 48 e49 e50 e51	e56 e57 e57 e58 e59	4070 1590 870 701 1210	1180 1160 1170 1180 2610	2870 2590 2170 1420 1360	518 1110 1100 560 408	3370 2710 2320 2040 2010	555 476 329 213 169	55 53 75 71 66	128 119 107 93 87
16 17 18 19 20	45 31 34 32 30	53 47 34 45 29	e52 e52 e51 50 e49	e58 e58 e57 e57 e57	2110 1580 1080 883 790	8650 11500 10500 5360 3140	1690 1750 1250 1040 932	343 330 1610 6320 4150	2240 2320 1900 1670 2320	156 148 144 145 145	66 66 65 65	84 85 541 523 2560
21 22 23 24 25	19 55 72 18 80	22 27 26 39 44	e48 48 e47 e46 44	e59 60 62 62 76	753 758 490 1420 8980	2600 2480 2560 2430 2260	830 570 504 483 457	2980 4680 4330 2060 1040	7570 10900 10200 4610 1810	146 148 140 128 125	65 65 80 126 123	1990 881 609 499 1250
26 27 28 29 30 31	107 84 35 63 48 58	40 32 24 34 34	e45 e45 e45 e45 e45 e46	69 62 73 124 171 476	11300 9270 3330 	2100 1940 1800 1800 1880 1630	399 358 321 287 261	764 608 509 442 419 523	1290 2670 4180 4250 4160	850 754 1840 1250 871 424	149 201 250 184 141 121	1330 908 770 697 659
MEAN MAX MIN AC-FT	44.8 107 14 2760	71.5 368 22 4260	43.2 52 24 2660	76.5 476 46 4700	1992 11300 131 110600	2945 11500 1160 181100	1148 2870 261 68300	1203 6320 202 73960	5826 17700 915 346700	764 3160 125 46950	112 281 53 6910	517 2560 84 30780

06916600 MARAIS DES CYGNES RIVER NEAR KANSAS-MISSOURI STATE LINE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG SEP
MEAN 1904 2138 MAX 15030 13830 (WY) 1987 1999 MIN 3.94 5.63 (WY) 1964 1964	1518 1100 9470 5023 1993 1993 1.56 3.08 1964 1964	1793 9357 1985 9.32 1964	2893 15760 1973 6.73 1964	3386 12900 1983 30.6 1981	3482 13560 1995 165 1965	4381 14740 1967 97.6 1988	1812 14540 1993 21.3 1980	717 1458 4392 13300 1968 1961 12.6 14.6 1963 1963
SUMMARY STATISTICS	FOR 2000 CALEN	DAR YEAR	FC	R 2001 WAT	TER YEAR	2	WATER YEAR	RS 1959 - 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS	663 7240 2.9 3.5 481700 1970 176	Jun 27 Aug 21 Aug 18		1215 17700 14 29 18100 22.91 6.6 879700 2810 212	Jun Cot Dec 4 Jun Jun Cot Cot	7 7 4 7	2212 6283 361 61400 .00 .00 64100 34.31 .00 1602000 6060 492	1993 1991 Oct 4 1986 Oct 12 1963 Nov 13 1963 Oct 4 1986 Oct 4 1986 many years



06916600 MARAIS DES CYGNES RIVER NEAR KANSAS-MISSOURI STATE LINE, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969-73, 1976-82, 2000 to current year.

 ${\tt REMARKS.--Unpublished \ records \ of \ intermittent \ sediment \ samples \ are \ available \ on \ the \ World \ Wide \ Web \ at \ http://ks.water.usgs.gov/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linea$ nwis. Sediment samples are collected only at selected flow conditions.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DIS- CHARGE, SPE- INST. CIFIC SEDI- CUBIC	SP. SUSP. SUSP. L FALL FALL M. DIAM. DIAM. ER * FINER * FINER IN THAN THAN MM .031 MM .062 MM
MAR	
29 1440 1780 378 9.0 84 401	
APR	
24 1535 473 376 19.0 63 80	
MAY	
22 1100 4780 301 19.5 776 10000	
24 0845 2220 316 19.0 535 3210	
JUN	
04 1615 13300 193 17.0 858 30800 98	
06 1600 14900 225 20.5 467 18800 98	
07 1700 18200 203 22.0 554 27200 57 62 72 84	97 98
AUG	
02 0930 223 340 31.0 63 38	
14 1230 70 319 30.0 42 7.9	

SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
(,0515)	(,0311)	(,0313)	(,0310)
99	100	100	100
	SUSP. FALL DIAM. % FINER THAN	SUSP. FALL DIAM. DIAM. FINER FINER THAN .125 MM (70344)	SUSP. SUSP. SUSP. FALL FALL DIAM. DIAM. DIAM. FINER *FINER *FINER THAN THAN .125 MM .250 MM .500 MM (70343) (70344) (70345)

06917000 LITTLE OSAGE RIVER AT FULTON, KS

LOCATION.--Lat $38^{\circ}01^{\circ}09^{\circ}$, long $94^{\circ}42^{\circ}48^{\circ}$, in SE $^{1}/_{4}$ NE $^{1}/_{4}$ NE $^{1}/_{4}$ sec.25, T.23 S., R.24 E., Bourbon County, Hydrologic Unit 10290103, on right bank at downstream side of county highway bridge, 0.8 mi north of Fulton.

DRAINAGE AREA.--295 mi².

PERIOD OF RECORD. -- November 1948 to current year.

REVISED RECORDS. -- WSP 1440: 1949(P), 1950(M). WDR KS-75-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 776.37 ft above sea level. Prior to May 28, 1952, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Satellite telemeter at station.

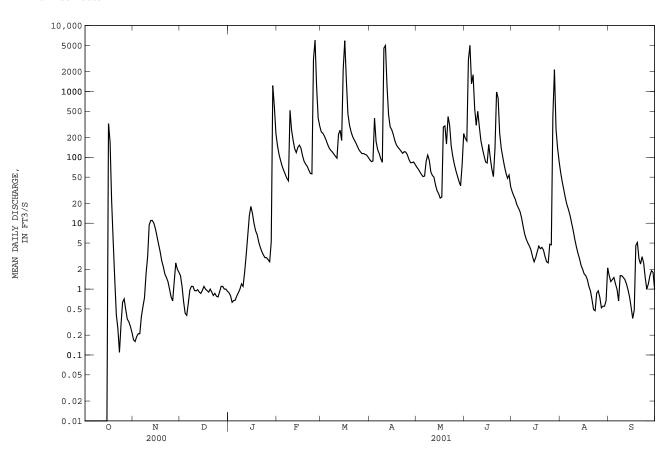
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Ti	me	Dischar (ft ³ /s	ge Gag	ge height (ft)		Date	Time	e	Discharge (ft ³ /s)		height ft)
Feb 25 Mar 15 Apr 11	03 24 01	00	6,76 6,34 *6,84	0	21.98 21.01 *22.17		Jun 3 Jul 28	181 060		6,270 3,590		0.84 4.34
		DISCHA	RGE, CUB	IC FEET PI	ER SECOND, DAIL	WATER YE Y MEAN VA		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.01 .01 .00 .00	.17 .16 .19 .21	1.6 1.1 .64 .43	.88 .79 .63 .67	150 e110 89 73 63	243 232 209 184 158	92 86 88 394 174	71 66 60 55 51	194 177 3010 5010 1310	30 26 23 19 17	58 42 32 24 19	1.6 1.3 1.4 1.5
6 7 8 9 10	.01 .01 .00 .00	.38 .54 .74 1.7 3.1	.61 .97 1.1 1.1	.79 .88 1.0 1.2	55 48 44 516 260	139 128 121 112 104	131 114 95 84 4550	52 87 108 90 60	1790 560 307 499 291	15 12 8.9 6.8 5.7	16 13 10 7.7 5.7	.99 .66 1.6 1.6 1.5
11 12 13 14 15	.00 .00 .00 .00	9.4 11 11 10 8.2	.94 .98 e.90 e.86 e.96	1.8 3.3 6.5 13	180 135 118 142 153	97 224 259 180 2190	4980 1190 441 290 263	53 50 38 31 28	179 135 106 85 82	5.0 4.5 3.9 3.1 2.6	4.4 3.5 2.9 2.3 2.0	1.4 1.2 .98 .76
16 17 18 19 20	326 173 22 5.3 1.4	6.3 4.8 3.7 2.7 2.2	e1.1 e1.0 e.95 e.90 e1.0	14 9.9 7.7 6.7 5.2	137 106 87 79 73	5880 1490 458 310 245	222 179 154 142 133	24 25 288 300 159	157 97 66 51 138	3.0 3.7 4.5 4.1 4.3	1.7 1.6 1.4 1.1	.36 .48 4.6 5.1 2.9
21 22 23 24 25	.41 .25 .11 .29 .63	1.7 1.5 1.3 1.0	e.90 e.80 e.86 e.78 e.76	4.3 3.7 3.3 3.0 3.0	64 57 56 3060 6020	207 185 167 148 131	124 115 122 120 109	417 309 150 104 79	982 796 230 137 100	3.9 3.1 2.6 2.5 4.8	.69 .49 .47 .87	2.4 3.1 2.5 1.5
26 27 28 29 30 31	.71 .49 .35 .32 .27	.66 1.3 2.5 2.0 1.8	.91 1.1 1.1 e1.0 1.0	2.8 2.6 5.2 1230 586 228	1170 391 298 	121 114 114 111 108 100	93 83 83 85 78	63 52 43 37 77 229	74 58 48 54 36	4.7 433 2140 266 138 86	.75 .52 .55 .55 .67 2.1	1.2 1.6 1.9 1.8 1.0
MEAN MAX MIN MED AC-FT	17.2 326 .00 .11 1050	3.04 11 .16 1.7 181	.92 1.6 .40 .95 57	69.9 1230 .63 3.3 4300	490 6020 44 114 27240	467 5880 97 167 28700	494 4980 78 123 29380	105 417 24 63 6460	559 5010 36 148 33240	106 2140 2.5 5.0 6520	8.32 58 .47 2.0 511	1.66 5.1 .36 1.5 99

06917000 LITTLE OSAGE RIVER AT FULTON, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN 197 231 MAX 3327 1867 (WY) 1987 1993 MIN .000 .000 (WY) 1954 1953	150 137 1170 715 1993 1973 .000 .000 1957 1957	233 1378 1985 .000 1964	354 2254 1973 .000 1964	393 2681 1994 .77 1996	329 2206 1995 9.05 1962	354 1982 1970 3.38 1972	234 2128 1951 .042 1954	62.5 699 1950 .000 1953	185 2377 1951 .000 1953
SUMMARY STATISTICS	FOR 2000 CALEN	DAR YEAR	FO	R 2001 WA	TER YEAR		WATER YEA	ARS 1949 -	2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN	68.6			190			237 656 9.21		1993 1953
HIGHEST DAILY MEAN LOWEST DAILY MEAN	3830	Jun 26 Sep 9		6020	Feb 25 Oct 3		51800 .00	Oct 12	1986 1949
ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE	.00	Oct 8		.00 6840 22.17	Oct 8 Apr 11 Apr 11		.00 62800 35.21	Oct 3	1952 1986 1986
INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT)	49770			.00			.00	many	
ANNUAL RUNOFF (AC-FI) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS	120 5.6 .01			275 9.9 .51			396 32 .20		



06917240 MARMATON RIVER AT UNIONTOWN, KS

LOCATION.--Lat $37^{\circ}50^{\circ}08^{\circ}$, long $94^{\circ}58^{\circ}52^{\circ}$, in SE $^{1}/_{4}$ SW $^{1}/_{4}$ sec.27, T.25 S., R.22 E., Bourbon County, Hydrologic Unit 10290104, on left bank at downstream side of U.S. Highway 3 bridge, 0.9 mi south of Uniontown, and at mile 73.5.

DRAINAGE AREA.--84.0 mi².

PERIOD OF RECORD.--April 2001 to September 2001.

GAGE.--Water-stage recorder. Datum of gage is 870.00 ft above sea level, from topographic map.

REMARKS.--Records good. Flow affected at times, usually in September, by draining of Bourbon County State Lake located about 5.0 mi upstream fo gage. Satellite telemeter at station.

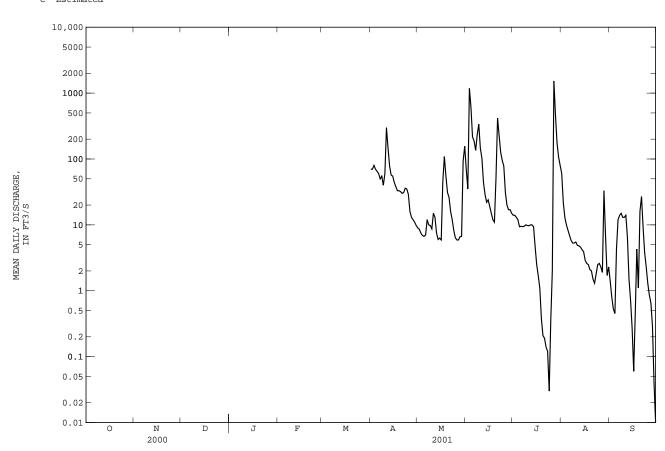
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum (*):

Date	Tim	ie	Discharge (ft ³ /s)		height		Date	Time	:	Discharge (ft ³ /s)		height
Jun 3	180	0	2,540	1	.0.88		Jul 27	1700)	*2,900	*1	1.72
		DISCHA	ARGE, CUBIC	FEET PER		WATER YE Y MEAN VA		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							e70	9.0	69	14	60	1.4
2							e70	8.6	35	14	22	.80
3							e80	7.5	1180	13	13	.53
4							e70	6.9	607	12	10	.45
5							e65	6.7	216	9.4	8.3	4.3
6							e60	7.0	188	9.5	6.9	12
7							e50	12	135	9.4	5.8	14
8							e55	10	233	9.5	5.3	15
9							e40	9.8	337	10	5.3	13
10							e60	8.7	145	9.8	5.5	13
11							298	15	103	9.7	4.9	14
12							147	13	44	10	4.8	6.4
13							78	7.5	29	10	4.6	1.5
14							57	6.0	22	9.4	4.2	.72
15							55	6.3	24	4.7	3.9	.27
16							44	5.9	19	2.5	2.9	.06
17							38	45	15	1.7	2.6	.45
18							33	109	12	1.1	2.5	4.3
19							33	55	11	.38	2.1	1.1
20							32	31	52	.21	2.0	16
21							30	26	416	.19	1.5	27
22							31	16	227	.14	1.3	9.3
23							36	12	126	.12	1.8	3.8
24							35	8.3	95	.03	2.5	2.3
25							29	6.4	78	.35	2.6	1.3
26							16	5.9	31	2.0	2.3	.86
27							13	5.9	20	1530	1.9	.65
28							12	6.6	20 17	467	33	.05
29							11		17	176		
30							9.8	6.7	15	107	6.8	.04
30							9.8	93 156		80	1.7 2.3	.00
31								120		80	2.3	
MEAN							55.3	23.3	151	81.4	7.56	5.49
MAX							298	156	1180	1530	60	27
MIN							9.8	5.9	11	.03	1.3	.00
AC-FT							3290	1430	8960	5000	465	327

06917240 MARMATON RIVER AT UNIONTOWN, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN							55.3	23.3	151	81.4	7.56	5.49
MAX							55.3	23.3	151	81.4	7.56	5.49
(WY)							2001	2001	2001	2001	2001	2001
MIN							55.3	23.3	151	81.4	7.56	5.49
(WY)							2001	2001	2001	2001	2001	2001



06917380 MARMATON RIVER NEAR MARMATON, KS

LOCATION.--Lat $37^\circ49^\circ03^\circ$, long $94^\circ47^\circ30^\circ$, in SW $^1/_4$ NE $^1/_4$ NE $^1/_4$ Sec.4, T.26 S., R.24 E., Bourbon County, Hydrologic Unit 10290104, on left bank 150 ft downstream from Cedar Creek, 2.0 mi southeast of Marmaton, and at mile 55.7.

DRAINAGE AREA.--292 mi².

PERIOD OF RECORD. -- May 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 780.66 ft above sea level.

REMARKS.--Records good. Flow affected at times, usually in September, by draining of Bourbon County State Lake located about 14.5 mi upstream of gage. Satellite telemeter at station.

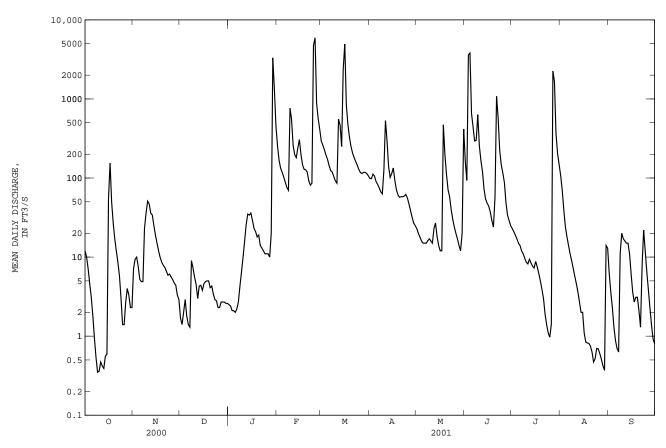
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ${\rm ft^3/s}$ and maximum (*):

Date	Tir	me	Discharg (ft ³ /s)	e Gag	e height (ft)		Date	Time	è	Discharge (ft ³ /s)		height (ft)
Jan 29 Feb 24 Mar 15		00	5,070 *9,940 8,670	*	17.44 26.42 24.27		Jun 3 Jul 27	2300 1900		9,270 5,500		85.30 8.32
		DISCH	ARGE, CUBI	C FEET PE		WATER YE Y MEAN VA	AR OCTOBER LUES	2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	12 10 7.1 4.6 3.1	7.1 9.4 10 7.6 5.2	1.7 1.4 2.0 2.9 1.8	2.5 2.4 2.1 2.1 2.0	256 168 133 118 103	292 260 227 195 171	99 98 112 106 90	23 20 18 16 15	164 93 3600 3810 655	23 21 19 17 15	106 69 39 24 18	6.2 3.6 2.3 1.3 .88
6 7 8 9 10	1.8 .94 .54 .35	4.9 4.9 23 36 51	1.4 1.3 9.0 7.3 5.6	2.2 2.7 4.3 6.5	88 76 70 764 548	143 124 119 104 92	83 75 67 63 126	15 15 16 17 16	440 294 300 632 257	14 12 11 9.7 8.6	14 11 9.0 7.2 5.7	.70 .63 11 20 17
11 12 13 14 15	.47 .42 .39 .56	47 36 34 25 19	4.5 3.0 4.3 4.4 3.8	16 26 35 34 36	257 197 181 241 305	86 555 468 250 2360	533 296 140 102 114	15 23 27 18 14	166 121 72 54 48	8.2 9.4 8.4 7.7 7.3	4.6 3.6 2.7 2.0 2.0	16 15 15 11 6.1
16 17 18 19 20	55 155 50 27 17	15 12 9.9 8.6 7.9	4.6 4.9 5.0 5.0 4.1	29 23 21 18 19	199 147 129 127 119	4960 845 477 327 249	134 93 71 61 57	12 12 471 197 111	44 37 29 24 57	8.8 7.5 6.2 5.0 3.9	1.1 .84 .82 .81 .75	3.6 2.7 3.1 3.1 2.1
21 22 23 24 25	12 8.6 5.8 3.0 1.4	7.4 6.6 5.9 6.1 5.6	4.3 3.4 2.9 2.8 2.3	14 13 12 11 11	92 81 86 4750 5930	206 181 161 145 128	58 58 59 62 56	71 58 40 30 24	1080 582 223 147 116	3.0 1.9 1.4 1.1	.63 .47 .52 .70 .69	1.3 7.6 22 12 6.6
26 27 28 29 30 31	1.4 2.7 4.0 3.3 2.3 2.3	5.2 4.7 4.4 3.3 2.9	2.3 2.7 2.7 2.7 2.6 2.6	11 10 20 3310 1350 458	877 565 411 	117 114 118 118 114 107	47 39 32 27 25	20 17 14 12 20 416	88 49 34 29 25	1.4 2260 1660 359 203 148	.60 .51 .42 .37 14	3.9 2.3 1.4 .93 .80
MEAN MAX MIN AC-FT	12.7 155 .35 782	14.2 51 2.9 844	3.53 9.0 1.3 217	178 3310 2.0 10940	608 5930 70 33760	446 4960 86 27400	99.4 533 25 5920	57.8 471 12 3560	442 3810 24 26320	157 2260 .97 9640	11.4 106 .37 702	6.67 22 .63 397

06917380 MARMATON RIVER NEAR MARMATON, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB MAR	APR MAY	JUN JUL	AUG SEP
MEAN 274 370 MAX 3884 1523 (WY) 1987 1975 MIN .029 .029 (WY) 1981 1981	997 980 1 1993 1973 1 .079 .047 .	312 496 1627 2603 1985 1973 .097 .10 1981 1981	481 369 3139 2002 1994 1990 .057 14.3 1981 1980	408 184 1652 2071 1977 1992 1.03 .11 1980 1980	83.2 186 793 1895 1985 1998 .057 .18 1980 1978
SUMMARY STATISTICS	FOR 2000 CALENDAR	R YEAR FOR	2001 WATER YEAR	WATER Y	TEARS 1972 - 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 90 PERCENT EXCEEDS	.00 S	Mar 16 Sep 7 Sep 5	166 5930 Feb 25 .35 Oct 9 .44 Oct 8 9940 Feb 24 .26.42 Feb 24 .16 Oct 9 0500 258 16 1.4	297 644 63.0 67900 .0 106000 42.8 .0 215400 465 42	Oct 3 1986 Aug 25 1978 Oct 13 1978 Oct 3 1986 Oct 3 1986 Oct 3 1986 Aug 1 1978



07137000 FRONTIER DITCH NEAR COOLIDGE, KS

LOCATION.--Lat $38^{\circ}02^{\circ}18^{\circ}$, long $102^{\circ}02^{\circ}19^{\circ}$, in SW $^{1}/_{4}$ SE $^{1}/_{4}$ NE $^{1}/_{4}$ sec.21, T.23 S., R.43 W., Hamilton County, Hydrologic Unit 11030001, on left bank 0.3 mi east of Colorado-Kansas State line, 0.5 mi downstream from Holly drain diversion, 1.5 mi west of Coolidge, and 2.3 mi down-stream from diversion of the Arkansas River.

PERIOD OF RECORD. -- October 1950 to current year.

REVISED RECORDS. -- WSP 1731: 1951.

GAGE.--Water-stage recorders and Parshall flume. Datum of gage is 3,343.14 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. This ditch diverts water from the Arkansas River in Colorado for use in Kansas. These records and records for the Arkansas River near Coolidge represent total flow of the Arkansas River at the Colorado-Kansas State line. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 84 ft³/s Aug. 1, 1975; no flow many days each year.

		DISCHAN	.GE, COBIC	, reel Pen		MEAN VAL		EK 2000 IC) SEFIEMBE	K 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	28 28 28 28 28	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	38 38 39 39 36	33 34 36 37 38	27 24 21 17 15
6 7 8 9 10	28 27 27 24 27	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	32 31 20 26 28	34 34 34 34 34	40 47 53 49 45	15 16 18 20 20
11 12 13 14 15	27 27 27 27 27	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	14 34 38 e34 e28	22 15 14 28 28	35 35 34 15 .59	.45 .17 .00 8.5	19 16 14 14 14
16 17 18 19 20	27 27 27 27 27	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	e28 e28 e27 e14 e1.5	27 26 23 21 23	.39 .17 .68 9.0	33 33 34 34 34	21 34 34 32 31
21 22 23 24 25	27 27 27 27 27	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	e.26 e.00 e.00 .00	27 27 26 27 26	33 34 34 34 34	33 33 33 33 32	31 31 30 30 29
26 27 28 29 30 31	27 27 19 .05 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00 .00	.00 .00 .00 	.00 .00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	26 31 37 39 39	34 23 33 33 33 33	32 32 32 31 31 29	29 25 24 23 22
MEAN MAX MIN AC-FT	24.2 28 .00 1490	.000 .00 .00	.000 .00 .00	.000	.000 .00 .00	.000 .00 .00	.000	7.96 38 .00 489	22.7 39 .00 1350	28.4 39 .17 1750	31.4 53 .00 1930	23.2 34 14 1380

CAL YR 2000 TOTAL 5460.45 MEAN 14.9 MAX 48 MIN .00 AC-FT 10830 WTR YR 2001 TOTAL 4229.76 MEAN 11.6 MAX 53 MIN .00 AC-FT 8390

e Estimated

07137500 ARKANSAS RIVER NEAR COOLIDGE, KS

LOCATION.--Lat $38^{\circ}01'34"$, long $102^{\circ}00'41"$, in NW $^{1}/_{4}$ NE $^{1}/_{4}$ NW $^{1}/_{4}$ sec.26, T.23 S., R.43 W., Hamilton County, Hydrologic Unit 11030001, on right bank at downstream side of county highway bridge, 1.0 mi south of Coolidge, 1.9 mi downstream from Colorado-Kansas State line, and at mile 1,099.3 .

WATER-DISCHARGE RECORDS

DRAINAGE AREA. -- 25,410 mi², of which 1,708 mi² is probably noncontributing.

PERIOD OF RECORD.--May to October 1903, March to May 1921, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS. -- WSP 1341: 1903, drainage area.

AC-FT

GAGE.--Water-stage recorder. Datum of gage is 3,330.84 ft above sea level. May 5 to Oct. 31, 1903, nonrecording gage, and Mar. 1 to May 31, 1921, water-stage recorder at present site at different datum. Oct. 1, 1950, to Mar. 31, 1966, water-stage recorder at site 0.3 mi upstream at datum 3.00 ft higher.

REMARKS.--Records good except those for estimated daily discharge, which are poor. Combined flow of river and Frontier Ditch (station 07137000) represents entire flow that enters Kansas. Flow regulated since Oct. 1948 by John Martin Reservoir (station 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 500,000 acres, and return flow from irrigated areas. Satellite telemeter at station.

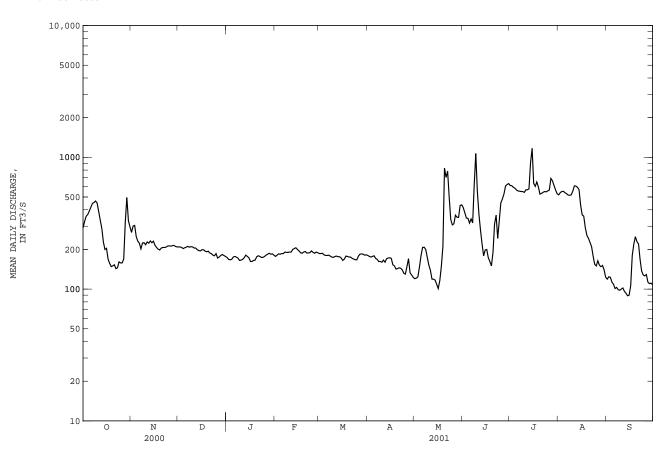
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV DEC .TAN FEB MAR APR MAY .TTTN TTTT. ATIG SEP 7 e190 e190 QΩ e199 e196 e162 e162 ---MEAN MAX MIN

arkansas river basin 305

07137500 ARKANSAS RIVER NEAR COOLIDGE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	136 332 1998 1.97 1979	124 424 1998 1.53 1979	129 534 1998 3.94 1979	136 972 1998 3.14 1979	142 602 1966 5.52 1978	137 658 1998 5.63 1978	220 1221 1987 9.43 1979	329 2478 1999 6.61 1963	499 8221 1965 4.20 1954	368 2255 1995 3.59 1974	341 1979 1965 1.94 1964	185 1079 1965 .90 1960
SUMMARY	STATIST:	ICS	FOR 2	2000 CALEI	NDAR YEAR	F	OR 2001 V	WATER YEAR		WATER YE	ARS 1951	- 2001
	MEAN ANNUAL M			370			265			229 1012 19.8		1965 1979
LOWEST	DAILY ME	AN		1250 114	Jul 18 Sep 23		1170 89	Jul 15 Sep 14		101000	Jul !	8 1965 9 1954
MAXIMUM MAXIMUM	PEAK FLO	AGE		120	Sep 18		95 1520 6.2	Sep 9 Jul 15 29 Jul 15		.00 158000 14.80	Jun 1	9 1954 7 1965 7 1965
ANNUAL	CANEOUS LO RUNOFF (A	AC-FT)		268600 748			81 191500 552	Sep 14		.00 166000 466	many	years
50 PERC	ENT EXCEI ENT EXCEI	EDS		294 178			190 131			132 10		



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964-68, 1970-73, 1975-81, July 1999 to current year.

PERIOD OF DAILY RECORD. --

SPECIFIC CONDUCTANCE: November 1963 to September 1968, January 1976 to September 1981, October 2000 to September 2001. WATER TEMPERATURE: November 1963 to September 1968, October 1976 to September 1981, July 1999 to current year.

 ${\tt INSTRUMENTATION.--Multiparameter\ water-quality\ monitor.}$

REMARKS.--Records fair. Interruptions in record are due to ice condtions or malfunction of the recording instrument or sensors.

EXTREMES FOR PERIOD OF DAILY RECORD .--

SPECIFIC CONDUCTANCE: Maximum, 6,800 miscrosiemens/cm, Mar. 29, 1978; minimum, 454 microsiemens/cm, June 18, 1965. WATER TEMPERATURE: Maximum, 34.5 °C, July 20, 1976; minimum, 0.0 °C, on several days during winter period.

EXTREMES FOR CURRENT YEAR .-

SPECIFIC CONDUCTANCE: Maximum, 4,480 microsiemens/cm, Apr. 28; minimum, 1,370 microsiemens/cm, June 8. WATER TEMPERATURE: Maximum, 30.1°C, July 11; minimum, 0.0°C, Dec. 11.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER	1	NOVEMBER			D	DECEMBER			JANUARY	7
1							4280	4250	4260			
2							4330	4270	4300			
3												
4				3980	3820	3910	4340	4310	4330			
5				4010	3880	3970	4350	4300	4330	4140	4090	4110
6				4070	3930	4000	4320	4290	4300	4130	4080	4100
7				4070	3980	4030	4350	4320	4330	4120	4090	4100
8				4040	3920	3980	4360	4330	4340	4150	4100	4120
9				4070	4000	4040	4370	4340	4350	4170	4100	4140
10				4100	4070	4080	4420	4340	4380	4150	4110	4130
11				4080	3970	4030				4120	4080	4100
12				4110	3990	4070				4130	4080	4110
13				4150	4080	4120				4110	4090	4100
14	3970	3770	3910	4170	4090	4140				4130	4070	4100
15	4020	3960	4000	4100	4050	4080				4130	4090	4110
16	4030	3970	4010		4050	e4090				4110	3940	4020
17	4060	4000	4030	4190	4140	4160				4020	3940	3960
18	4140	4000	4040	4220	4090	4170				4160	4020	4110
19	4150	4070	4090	4170	4070	4140				4160	4120	4140
20	4150	4060	4100	4220	4070	4160				4160	4130	4140
21	4170	4060	4110	4280	4210	4250				4150	4110	4130
22	4210	4090	4140							4170	4070	4120
23	4140	3980	4080							4100	4050	4090
24	4130	3890	4020	4250	4220	4240				4110	4060	4080
25	4130	4020	4070	4250	4220	4230				4100	4070	4080
26	4230	4110	4150	4260	4220	4230				4110	4060	4080
27	4120	4030	4070	4250	4210	4230				4080	4030	4060
28	4070	2240	3540	4250	4220	4230				4030	3990	4010
29	3790	2440	3110	4260	4230	4250				4080	4020	4050
30	4020	3780	3910	4270	4240	4260				4090	4060	4080
31	3970	3760	3900							4060	4010	4040
MONTH	4230	2240	3960	4280	3820	4120	4420	4250	4320	4170	3940	4090

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SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	4090 4120 4100 4040 4010	4040 4050 4040 4000 3970	4060 4080 4060 4020 3990	4170 4110 4120 4150	4100 4050 4050 4110	4130 4080 4070 4130 4120	4130 4150 4150 4000	4040 4120 4000 3950	4020 4090 4140 4060 3970	4470 4370 4120 3950	4340 4120 3900 3690	4410 4340 4270 4000 3840
6 7 8 9 10	4030 4070 4080 4130 4100	3980 4010 4010 3980 4070	4000 4040 4060 4070 4090	4120 4090 4120	4070 4070 4080	e4080 4080 4090 4080 4100	4120 4180 4220 4200 4230	3980 4090 4170 4130 4190	4050 4140 4200 4190 4210	3700 3710 3760 4090 4180	3580 3620 3640 3730 4080	3640 3660 3710 3900 4120
11 12 13 14 15	4090 4140 4110 4140 4160	4040 4080 4080 4090 4110	4070 4100 4090 4110 4140	4080 4120 4140 4150 4210	4040 4040 4110 4100 4150	4060 4070 4130 4130 4190	4290 4300 4280 4340 4370	4200 4260 4220 4230 4280	4250 4280 4250 4300 4330	4180 4220 4180 4260	4090 4120 4070 4120	4130 4160 4140 4180
16 17 18 19 20	4180 4210 4210 4220 4180	4130 4160 4130 4170 4160		4210 4220 4190 4230 4250	4180 4170 4170 4120 4220	4200 4200 4180 4160 4230	 	 	 	3920 3940 2860	3620 2860 1760	3770 3600 2210
21 22 23 24 25	4200 4160 4150 4150	4150 4150 4140 4120	e4180 4170 4160 4150 4140	4240 4230 4210 4240 4230	4210 4210 4190 4180 4180	4220 4220 4200 4210 4220	4420 4340 4340 4300 4360	4340 4240 4290 4200 4210	4380 4310 4320 4270 4290	3010 3010 3460 3750 3760	2700 2820 3010 3440 3680	2930 2890 3240 3590 3730
26 27 28 29 30 31	4160 4190 4220 	4120 4150 4140 	4140 4170 4180 	4180 4110 4060 4070 4090 4060	4070 3940 3980 4040 4040 3990	4100 3990 4030 4050 4070 4020	4250 4300 4480 4450 4430	3850 3980 4300 4200 4330	4120 4090 4400 4380 4400	3760 3630 3510 3560 3270 3280	3610 3430 3370 3260 2830 2830	3680 3510 3420 3480 3130 3090
MONTH	4220	3970	4110	4250	3940	4120	4480	3850	4220	4470	1760	3670
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE	MEAN		MIN JULY	MEAN	MAX	MIN AUGUST	MEAN	MAX	MIN SEPTEMBE	
DAY 1 2 3 4 5	3420 3470 3580 3510 3620		3320 3420 3500 3490 3540	MAX 2810 2790 2860 2850 2890		2770 2750 2770 2810 2840	2910 2900 2960 3020 2970		2840 2830 2850 2910 2910			
1 2 3 4	3420 3470 3580 3510	JUNE 3240 3370 3440 3480	3320 3420 3500 3490	2810 2790 2860 2850 2890 2890 2900 2870 2870 2850	JULY 2730 2730 2720 2750 2830 2800 2780 2770 2770 2750	2770 2750 2770 2810	2910 2900 2960 3020	AUGUST 2780 2760 2800 2800 2880 2840	2840 2830 2850 2910 2910 2880 2840 2810 2830 2800	4140 4090 4040 4070 4100 4200 4150 4130 4160 4140	4030 3960 3950 3960	4080 4030 4000 4030
1 2 3 4 5 6 7 8 9	3420 3470 3580 3510 3620 3570 3690 3560 2850	JUNE 3240 3370 3440 3480 3480 3500 3540 1370 1440	3320 3420 3500 3490 3540 3530 3600 2460 1780	2810 2790 2860 2850 2890 2890 2900 2870 2870	JULY 2730 2730 2720 2750 2830 2800 2780 2770 2770 2750	2770 2750 2770 2810 2840 2850 2860 2830 2830 2810	2910 2900 2960 3020 2970 2940 2900 2860 2870	2780 2760 2800 2800 2880 2880 2810 2770 2770 2770 2700	2840 2830 2850 2910 2910 2880 2840 2810 2830 2800	4140 4090 4040 4070 4100 4200 4150 4130 4160	\$EPTEMBE 4030 3960 3950 3960 3990 4080 4060 4100 4070	4080 4030 4000 4030 4040 4130 4120 4110 4110
1 2 3 4 5 6 7 8 9 10 11 12 13 14	3420 3470 3580 3510 3620 3570 3690 3560 2850 2630 3190 3560 3810 3990	JUNE 3240 3370 3440 3480 3480 3500 3540 1370 1440 2040 2630 3190 3560 3800	3320 3420 3500 3490 3540 3530 3600 2460 1780 2370 2920 3380 3710 3910	2810 2790 2860 2850 2890 2900 2870 2870 2850 2820 2860 2860 2790	JULY 2730 2730 2750 2830 2800 2780 2770 2750 2750 2750 2750 2750 2750 2780 2780 2280	2770 2750 2770 2810 2840 2850 2860 2830 2830 2810 2800 2810 2820 2500	2910 2900 2960 3020 2970 2940 2900 2860 2870 2920 2870 2880 2880	2780 2760 2800 2800 2880 2880 2270 2770 2770 2700 2740 2780 2630	2840 2830 2850 2910 2910 2880 2840 2830 2800 2820 2810 2780	4140 4090 4040 4070 4100 4200 4150 4130 4160 4140 4150 4200 4240	\$EPTEMBE 4030 3960 3950 3960 3990 4080 4060 4070 4060 4050 4110 4120	4080 4030 4030 4030 4040 4130 4120 4110 4110 4110 4110 4160 4190
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	3420 3470 3580 3510 3620 3570 3560 2850 2630 3190 3560 3810 3990 4060 3960 4130 4130 4120	JUNE 3240 3370 3440 3480 3480 3500 3540 1370 1440 2040 2630 3190 3560 3800 3920 3800 3940 4110 4120	3320 3420 3500 3540 3540 3530 3600 2460 1780 2370 2920 3380 3710 3990 4030 4150 4170	2810 2790 2860 2850 2890 2900 2870 2870 2850 2860 2790 2650 2970 2920 2920 2970	JULY 2730 2730 2750 2830 2800 2780 2770 2750 2750 2750 2750 2760 2750 2780 2280 1820 2290 2790 2790	2770 2750 2770 2810 2840 2850 2860 2830 2810 2800 2810 2820 2500 2250 2680 2850 2830 2830	2910 2900 2960 3020 2970 2940 2900 2860 2870 2920 2870 2880 3100 3180 3120 3530 3650	2780 2760 2800 2800 2880 2880 2840 2770 2770 2770 2700 2740 2780 2630 2870 3040 3020 3120 3530	2840 2830 2850 2910 2910 2840 2840 2830 2800 2820 2810 3010 3120 3060 3360 33590	4140 4090 4040 4070 4100 4200 4150 4130 4160 4140 4150 4200 4240 4200 4270 3210 2970 3000	\$EPTEMBE 4030 3960 3950 3960 3990 4080 4060 4070 4060 4050 4110 4120 4140 3210 2880 2840 2880	4080 4030 4030 4040 4030 4040 4130 4120 4110 4110 4110 4170 4170 3970 2990 2890 2920
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	3420 3470 3580 3510 3620 3570 3560 2850 2630 3190 3560 3810 3990 4060 4130 4130 4220 4200 3200 3360 3500 3500 3500 3600 3600 3600 36	JUNE 3240 3370 3440 3480 3480 3500 3540 1370 1440 2040 2630 3190 3560 3800 3920 3800 3920 3800 3940 4110 4120 3200 2960 2860 3060 2820	3320 3420 3500 3500 3540 3530 3600 2460 1780 2370 2920 3380 3710 3990 4030 4150 4170 3720 3030 2930 33110	2810 2790 2860 2850 2890 2900 2870 2870 2850 2860 2790 2650 2970 2920 2870 2920 2870 2920 2870 2920 2920 2870 2920 2920 2920 2920 2920 2920 2920 29	JULY 2730 2730 2730 2750 2830 2800 2780 2770 2750 2760 2750 2780 2280 1820 2290 2790 2760 2760 2760 2770 2770 2760 2770 277	2770 2750 2770 2810 2840 2850 2860 2830 2810 2810 2820 2500 2250 2680 2850 2850 2850 2850 2850 2850 2850 28	2910 2900 2960 3020 2970 2940 2900 2860 2870 2920 2870 2880 3100 3120 3530 3650 3670 3740 3860 3910 3890	2780 2780 2800 2800 2880 2880 2840 2770 2770 2770 2700 2740 2780 2630 2630 2870 3040 3020 3120 3530 3640 3690 3750 3810	2840 2830 2850 2910 2910 2840 2840 2830 2800 2820 2810 3010 3120 3060 3360 33590 3650 3680 3760 3850 3860	4140 4090 4040 4070 4100 4200 4150 4130 4160 4140 4150 4200 4240 4200 4270 3210 3000 3060 3130 3560 3740 3880	\$\text{SEPTEMBE}\$ 4030 3960 3950 3960 3990 4080 4060 4070 4060 4080 4050 4110 4120 4140 3210 2880 2880 2880 2980 3020 3120 3560 3740	4080 4030 4000 4030 4040 4130 4120 4110 4110 4110 4110 4170 3970 2990 2890 2890 3020 3020 3340 3652 3820
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	3420 3470 3580 3510 3620 3570 3690 2630 3190 3560 3810 3990 4060 3960 4130 4220 4200 3200 3360 3360 3200 3600 3540 2870 2880 2880 2880 2880 2880 2880 288	JUNE 3240 3370 3440 3480 3480 3500 3540 1370 1440 2040 2630 3190 3560 3800 3920 3800 3940 4110 4120 3200 2960 2860 3060 2820 2780 2780 2780 2680 2640 2650 2690	3320 3420 3520 3590 3540 3530 3600 2460 1780 2370 2920 3380 3710 3990 4030 4150 4170 3720 3030 2930 3320 2930 3320 2940 2740 2740 2740 2740	2810 2790 2860 2850 2890 2990 2900 2870 2850 2860 2860 2790 2650 2970 2920 2870 2920 2930 2930 2940 2940 2930 2930	JULY 2730 2730 2730 2750 2830 2800 2780 2770 2750 2750 2760 2750 2760 2750 2760 2750 2780 2280 1820 2290 2760 2760 2770 2740 2820 2850 2850 2780 2780 2780 2770 2740 2740 2820	2770 2750 27770 2810 2840 2850 2860 2830 2810 2820 2500 2250 2680 2850 2830 2250 2680 2850 2830 2250 2680 2830 2810 2820 2920 2920	2910 2900 2960 3020 2970 2940 2900 2860 2870 2920 2870 2880 3100 3120 3530 3650 3670 3740 3860 3910 3890 3850 3880 3850	2780 2760 2800 2800 2880 2880 2270 2770 2770 2700 2740 2780 2630 2870 3040 3020 3120 3620 3690 3750 3810 3740 3770 3840	2840 2830 2850 2910 2910 2840 2840 2830 2800 2820 2810 2780 3010 3120 3060 3350 3650 3650 3760 3850 3850 3850 3850 3850 3850 3850 385	4140 4090 4040 4070 4100 4200 4150 4150 4150 4200 4220 4270 3210 2970 3000 3060 3130 3560 3740 3880 3990 4090 4150 4060 4060	\$EPTEMBE 4030 3960 3950 3960 3990 4080 4060 4100 4070 4060 4110 4120 4140 3210 2880 2980 3020 3560 3740 3880 3980 4040 3990 3980 4000	4080 4030 4030 4040 4030 4040 4130 4120 4110 4110 4110 4110 4110 4170 3970 2990 2890 2920 3020 3020 3340 3650 3820 3820 4080 4080 4030 4030 4030 4030 4030 403

e Estimated

07137500 ARKANSAS RIVER NEAR COOLIDGE, KS--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		121112	,	MIIIDIC (DEC.	-,,		OOIODDIC D	.000 10 2		. 2001		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		NO	OVEMBER		D	ECEMBER			JANUARY	
1	21.3	15.8	18.6	13.8	10.1	12.0	6.6					
2	20.7 20.7	15.9 15.5	18.3 18.1	12.2	9.8	10.9 10.3	3.9	1.0	2.3 2.1			
4 5	18.9	15.9	17.2	12.3 13.8	8.7 9.1	10.3 10.8	5.9 6.8	1.6 2.5	3.7 4.5	 7.1	2.5	4.7
6 7				9.2 8.2	6.1 4.2	7.8 6.1	6.1 5.8	2.6 2.8	4.5 4.4	7.6 7.1	2.5 3.7	5.0 5.1
8 9				8.4 8.4	4.3 3.7	6.2 5.8	6.5 7.1	3.8 3.0	5.0 4.9	5.6 5.4	1.3 .5	3.5 3.0
10				5.0	3.5	4.1	5.6	.7	3.2	7.5	3.2	5.2
11 12				6.2	3.3	5.2				7.2 7.1	2.7	5.0
13				6.4 7.0	1.7	3.8 4.4				6.7	2.2	4.8 5.4
14 15	17.1 15.4	12.0 11.8	14.6 13.8	7.9 8.4	2.4 4.6	4.9 6.2				5.4 5.2	.9 1.5	3.0 3.1
16	19.0	13.9	15.8			4.6						2.1
17 18	18.9	13.2	15.9	6.6	2.2	4.2						
19	18.6 18.1	12.8 12.2	15.6 15.1	6.3 7.1	2.2	4.2 4.6						
20	17.5	12.4	14.9	6.8	2.7	4.7						
21 22	17.6 17.4	11.3 14.5	14.4 15.7	7.1	2.1	4.6 5.7				5.5	1.3	3.1 2.1
23	15.6	13.5	14.2			5.3				6.4	2.2	4.1
24 25	$18.4 \\ 17.1$	13.8 12.6	15.6 14.9	7.4 7.2	3.0 3.0	5.1 5.0				6.1 5.2	2.2 1.8	4.3 3.5
26	17.2	11.9	14.3	5.6	2.3	4.1				6.7	2.3	4.4
27 28	16.5 15.4	12.1 13.6	14.0 14.6	7.2 7.2	3.1	4.9 5.2				4.8 4.7	1.5 .7	3.0 2.4
29	15.6	12.4	13.8	6.4	2.4	4.4				5.6	2.1	3.8
30 31	15.6 15.5	11.6 11.3	13.6 13.2	6.8	2.9	4.7				5.7 6.8	2.8 2.0	$\frac{4.1}{4.1}$
MONTH	21.3	11.3	15.3	13.8	1.7	6.0	7.1	.7	4.0	7.6	.5	3.9
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.1	1.3	3.6	9.5	1.2	5.1			12.5	25.9	13.9	19.6
2 3	6.2						16.7	10 6	10 -			14.1
4 5	8.1	.7 2.7	3.4 5.2	11.1 11.5	5.0 5.2	7.8 8.3	16.7 16.3	10.6 13.1	13.5 14.4	 11.6	9.9	10.7
5	8.1 9.2 8.5					7.8	16.7				9.9	10.7 11.2 12.3
	9.2 8.5	2.7 5.2 3.7	5.2 6.9 6.2	11.5 12.6 12.7	5.2 6.1 6.0	7.8 8.3 9.2 9.4	16.7 16.3 15.6 18.5	13.1 11.9 12.0	14.4 13.7 14.8	11.6 15.7	9.9 10.0	11.2 12.3
6 7	9.2 8.5 7.3 10.3	2.7 5.2 3.7 5.2 4.2	5.2 6.9 6.2 6.1 6.9	11.5 12.6 12.7 10.4	5.2 6.1 6.0 7.9 6.2	7.8 8.3 9.2 9.4 9.2 9.7	16.7 16.3 15.6 18.5 17.8 18.7	13.1 11.9 12.0 12.6 8.9	14.4 13.7 14.8 14.6 13.5	11.6 15.7 19.5 19.6	9.9 10.0 9.6 12.8	11.2 12.3 14.1 16.0
6 7 8 9	9.2 8.5 7.3 10.3 7.7	2.7 5.2 3.7 5.2 4.2 .4	5.2 6.9 6.2 6.1 6.9 4.0	11.5 12.6 12.7 10.4 13.0 14.9 15.3	5.2 6.1 6.0 7.9 6.2 8.1 7.4	7.8 8.3 9.2 9.4 9.2 9.7 11.3	16.7 16.3 15.6 18.5 17.8 18.7 19.9	13.1 11.9 12.0 12.6 8.9 10.5 10.9	14.4 13.7 14.8 14.6 13.5 15.0 14.9	11.6 15.7 19.5 19.6 24.1	9.9 10.0 9.6 12.8 13.2	11.2 12.3 14.1 16.0 18.3 20.4
6 7 8	9.2 8.5 7.3 10.3 7.7 	2.7 5.2 3.7 5.2 4.2 .4 	5.2 6.9 6.2 6.1 6.9 4.0 .9	11.5 12.6 12.7 10.4 13.0 14.9 15.3 12.3	5.2 6.1 6.0 7.9 6.2 8.1 7.4 5.2	7.8 8.3 9.2 9.4 9.2 9.7 11.3 11.3 9.4	16.7 16.3 15.6 18.5 17.8 18.7 19.9	13.1 11.9 12.0 12.6 8.9 10.5 10.9	14.4 13.7 14.8 14.6 13.5 15.0 14.9 15.1	11.6 15.7 19.5 19.6 24.1 24.8	9.9 10.0 9.6 12.8 13.2	11.2 12.3 14.1 16.0 18.3 20.4 19.6
6 7 8 9 10	9.2 8.5 7.3 10.3 7.7 7.4	2.7 5.2 3.7 5.2 4.2 .4 	5.2 6.9 6.2 6.1 6.9 4.0 .9 1.6	11.5 12.6 12.7 10.4 13.0 14.9 15.3 12.3	5.2 6.1 6.0 7.9 6.2 8.1 7.4 5.2	7.8 8.3 9.2 9.4 9.2 9.7 11.3 9.4	16.7 16.3 15.6 18.5 17.8 18.7 19.9	13.1 11.9 12.0 12.6 8.9 10.5 10.6 7.6	14.4 13.7 14.8 14.6 13.5 15.0 14.9 15.1	11.6 15.7 19.5 19.6 24.1 24.8	9.9 10.0 9.6 12.8 13.2 14.9	11.2 12.3 14.1 16.0 18.3 20.4 19.6
6 7 8 9 10 11 12 13	9.2 8.5 7.3 10.3 7.7 7.4 8.7 8.6	2.7 5.2 3.7 5.2 4.2 .4 1.8 2.7 5.3	5.2 6.9 6.2 6.1 6.9 4.0 .9 1.6 4.2 5.5 6.6	11.5 12.6 12.7 10.4 13.0 14.9 15.3 12.3 8.4 9.9 14.6	5.2 6.1 6.0 7.9 6.2 8.1 7.4 5.2 4.4 3.6 5.3	7.8 8.3 9.2 9.4 9.2 9.7 11.3 11.3 9.4 6.0 6.6 9.7	16.7 16.3 15.6 18.5 17.8 18.7 19.9 19.2 20.0	13.1 11.9 12.0 12.6 8.9 10.5 10.9 10.6 7.6 6.0 8.2	14.4 13.7 14.8 14.6 13.5 15.0 14.9 15.1 10.5 10.3 12.6	11.6 15.7 19.5 19.6 24.1 24.8 23.8 25.8 26.3	9.9 10.0 9.6 12.8 13.2 14.9 15.7 14.9 16.0	11.2 12.3 14.1 16.0 18.3 20.4 19.6 19.7 19.8 20.8
6 7 8 9 10 11 12	9.2 8.5 7.3 10.3 7.7 7.4 8.7	2.7 5.2 3.7 5.2 4.2 .4 1.8 2.7	5.2 6.9 6.2 6.1 6.9 4.0 .9 1.6	11.5 12.6 12.7 10.4 13.0 14.9 15.3 12.3	5.2 6.1 6.0 7.9 6.2 8.1 7.4 5.2 4.4 3.6	7.8 8.3 9.2 9.4 9.2 9.7 11.3 11.3 9.4 6.0 6.6	16.7 16.3 15.6 18.5 17.8 18.7 19.9 19.2 20.0	13.1 11.9 12.0 12.6 8.9 10.5 10.9 10.6	14.4 13.7 14.8 14.6 13.5 15.0 14.9 15.1 10.5	11.6 15.7 19.5 19.6 24.1 24.8 23.8 25.8	9.9 10.0 9.6 12.8 13.2 14.9 15.7 14.9	11.2 12.3 14.1 16.0 18.3 20.4 19.6
6 7 8 9 10 11 12 13 14 15	9.2 8.5 7.3 10.3 7.7 7.4 8.7 8.6 6.9 7.6	2.7 5.2 3.7 5.2 4.2 .4 1.8 2.7 5.3 2.5 1.8	5.2 6.9 6.2 6.1 6.9 4.0 .9 1.6 4.2 5.5 6.6 3.9 4.2	11.5 12.6 12.7 10.4 13.0 14.9 15.3 12.3 8.4 9.9 14.6 15.4 10.0	5.2 6.1 6.0 7.9 6.2 8.1 7.4 5.2 4.4 3.6 5.3 8.1 4.9	7.8 8.3 9.2 9.4 9.2 9.7 11.3 11.3 9.4 6.0 6.6 9.7 11.3 6.6	16.7 16.3 15.6 18.5 17.8 18.7 19.9 19.2 20.0 15.8 16.2 17.9 20.0 18.9	13.1 11.9 12.0 12.6 8.9 10.5 10.9 10.6 7.6 6.0 8.2 10.0 10.8	14.4 13.7 14.8 14.6 13.5 15.0 14.9 15.1 10.5 10.3 12.6 14.5 14.8	11.6 15.7 19.5 19.6 24.1 24.8 23.8 25.8 26.3 26.4 28.3	9.9 10.0 9.6 12.8 13.2 14.9 15.7 14.9 16.0 15.9 16.6	11.2 12.3 14.1 16.0 18.3 20.4 19.6 19.7 19.8 20.8 20.6 21.9
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6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	9.2 8.5 7.3 10.3 7.7 7.4 8.7 8.6 9 7.6 5.4 3.5 7.3 10.7 8.5	2.7 5.2 3.7 5.2 4.2 .4 1.8 2.7 5.3 2.5 1.8 2.5 .7 1.2 3.8 5.3	5.2 6.9 6.2 6.1 6.9 4.0 .9 1.6 4.2 5.5 6.6 3.9 4.2 3.5 2.1 3.8 7.0 6.5	11.5 12.6 12.7 10.4 13.0 14.9 15.3 12.3 8.4 9.9 14.6 15.4 10.0 10.0 6.7 8.3 13.8 16.6	5.2 6.1 6.0 7.9 6.2 8.1 7.4 5.2 4.4 3.6 5.3 8.1 4.9 3.0 4.1 4.0 7.4	7.8 8.3 9.2 9.4 9.2 9.7 11.3 9.4 6.0 6.6 9.7 11.3 6.6 6.1 4.8 5.8 9.2 11.9	16.7 16.3 15.6 18.5 17.8 18.7 19.9 19.2 20.0 15.8 16.2 17.9 20.0 18.9 15.1 13.7 19.5 19.7	13.1 11.9 12.0 12.6 8.9 10.5 10.9 10.6 7.6 6.0 8.2 10.0 10.8 9.2 7.0 6.6 12.5 	14.4 13.7 14.8 14.6 13.5 15.0 14.9 15.1 10.5 10.3 12.6 14.5 14.8 11.0 9.9 12.5 16.0 14.5	11.6 15.7 19.5 19.6 24.1 24.8 23.8 25.8 26.3 26.4 28.3 27.6 24.8 26.1 22.2 21.3	9.9 10.0 9.6 12.8 13.2 14.9 15.7 14.9 16.0 15.9 16.6 17.2 17.3 16.0 15.6 17.2	11.2 12.3 14.1 16.0 18.3 20.4 19.6 19.7 19.8 20.6 21.9 22.1 20.6 20.7 18.1 17.7
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	9.2 8.5 7.3 10.3 7.7 8.6 6.9 7.6 5.4 3.5 3.10.7 8.5 7.6 8.5 9.5	2.7 5.2 3.7 5.2 4.2 .4 1.8 2.7 5.3 2.5 1.8 2.5 1.2 3.8 5.3 5.7 5.9 3.7	5.2 6.9 6.2 6.1 6.9 1.6 4.2 5.5 6.6 3.9 4.2 3.5 2.1 3.5 2.1 3.9 5.0 6.5	11.5 12.6 12.7 10.4 13.0 14.9 15.3 12.3 8.4 9.9 14.6 15.4 10.0 10.0 6.7 8.3 13.8 16.6 18.1 16.6 19.0 11.8 6.4	5.2 6.1 6.0 7.9 6.2 8.1 7.4 5.2 4.4 3.6 5.3 8.1 4.9 3.0 4.1 4.0 4.9 7.4 10.2 10.7 11.8 6.4 3.9	7.8 8.3 9.2 9.4 9.2 9.7 11.3 9.4 6.6 9.7 11.3 6.6 6.1 4.8 5.8 9.2 11.9 13.9 14.7 8.0 5.5	16.7 16.3 15.6 18.5 17.8 18.7 19.9 19.2 20.0 15.8 16.2 17.9 20.0 18.9 15.1 13.7 19.5 19.7 20.3 18.9 18.9 20.0 20.3 21.6 22.7	13.1 11.9 12.0 12.6 8.9 10.5 10.9 10.6 7.6 6.0 8.2 10.0 10.8 9.2 7.0 6.6 12.5 	14.4 13.7 14.8 14.6 13.5 15.0 14.9 15.1 10.5 12.6 14.5 14.8 11.0 9.9 12.5 16.0 14.5 14.6 15.7 12.1 14.9 17.1	11.6 15.7 19.5 19.6 24.1 24.8 23.8 26.3 26.4 28.3 27.6 24.8 26.1 22.2 21.3 17.9 18.5 21.4 21.6 22.2	9.9 10.0 9.6 12.8 13.2 14.9 15.7 14.9 16.0 17.2 17.3 16.0 16.1 15.6 12.9 12.1 15.5 15.5 15.5 15.0 14.1	11.2 12.3 14.1 16.0 18.3 20.4 19.6 19.7 19.8 20.6 21.9 22.1 20.6 20.7 18.1 17.7 15.0 15.1 18.3 18.1
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	9.2 8.5 7.3 10.3 7.7 7.4 8.7 8.6 9.7 6.9 7.6 5.4 3.5 7.3 10.7 8.5 8.5 8.2 9.5	2.7 5.2 4.2 4 1.8 2.7 5.3 2.5 1.8 2.5 7 1.2 3.8 5.3	5.2 6.9 6.2 6.1 6.9 1.6 4.2 5.5 6.6 3.9 4.2 3.5 2.1 3.8 7.0 6.5	11.5 12.6 12.7 10.4 13.0 14.9 15.3 12.3 8.4 9.9 14.6 15.4 10.0 10.0 6.7 8.3 13.8 16.6 18.1 16.6 19.0 11.8 6.4	5.2 6.1 6.0 7.9 6.2 8.1 7.4 5.3 8.1 4.9 7.4 10.2 11.8 6.4 3.9	7.8 8.3 9.2 9.4 9.2 9.7 11.3 9.4 6.0 6.6 9.7 11.3 6.6 6.1 4.8 9.2 11.9 13.8 14.7 8.0 5.5	16.7 16.3 15.6 18.5 17.8 18.7 19.9 19.2 20.0 15.8 16.2 17.9 20.0 18.9 15.1 13.7 19.5 19.7 20.3 18.9 18.3 21.6 22.7	13.1 11.9 12.6 8.9 10.5 10.9 10.6 6.0 8.2 10.0 10.8 9.2 7.0 6.6 12.5 9.6 10.8 6.7 9.1 12.1	14.4 13.7 14.8 14.6 13.5 15.0 14.9 15.1 10.3 12.6 14.5 14.8 11.0 9.9 12.5 16.0 14.5 14.6 15.7 12.1 14.9 17.1	11.6 15.7 19.5 19.6 24.1 24.8 23.8 25.8 26.3 26.4 28.3 27.6 24.8 26.1 22.2 21.3 17.9 18.5 21.4 21.6 22.2	9.9 10.0 9.6 12.8 13.2 14.9 15.7 14.9 16.0 15.9 16.6 17.2 17.3 16.0 16.1 15.6 12.9 12.9 15.5 15.6	11.2 12.3 14.1 16.0 18.3 20.4 19.6 19.7 19.8 20.6 21.9 22.1 20.6 20.7 18.1 17.7 15.0 15.1 18.3 18.3
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	9.2 8.5 7.3 10.3 7.7 8.6 6.9 7.6 5.4 3.5 3.10.7 8.5 7.6 8.5 9.5 8.3 5.5 2.8	2.7 5.2 4.2 4.2 1.8 2.7 5.3 2.5 1.8 2.5 1.2 3.8 5.3 5.7 5.9 3.7	5.2 6.9 6.2 6.1 6.9 1.6 4.2 5.5 6.6 3.9 4.2 3.5 2.1 3.5 2.1 3.9 5.0 6.5 6.7 3.1 1.6	11.5 12.6 12.7 10.4 13.0 14.9 15.3 12.3 8.4 9.9 14.6 15.4 10.0 10.0 6.7 8.3 13.8 16.6 19.0 11.8 6.4	5.2 6.1 6.0 7.9 6.2 8.1 7.4 5.2 4.3 6.3 8.1 4.9 3.0 4.1 4.9 7.4 10.2 10.7 11.8 6.4 3.9 1.8 3.5 6.8	7.8 8.3 9.2 9.4 9.2 9.7 11.3 9.4 6.6 9.7 11.3 6.6 6.1 4.8 9.2 11.9 13.9 13.9 13.9 14.7 8.0 9.9	16.7 16.3 15.6 18.5 17.8 18.7 19.9 19.2 20.0 15.8 16.2 17.9 20.0 18.9 15.1 13.7 19.5 19.7 20.3 18.9 18.9 20.0 22.7	13.1 11.9 12.0 12.6 8.9 10.5 10.9 10.6 7.6 6.0 8.2 10.0 10.8 9.2 7.0 6.6 12.5 9.6 10.8 12.1 11.6 12.1 11.6 12.8 11.8	14.4 13.7 14.8 14.6 13.5 15.0 14.9 15.1 10.5 14.5 14.8 11.0 9.9 12.5 16.0 14.5 14.6 15.7 12.1 14.9 17.1	11.6 15.7 19.5 19.6 24.1 24.8 23.8 25.8 26.4 28.3 27.6 24.8 26.1 22.2 21.3 17.9 18.5 21.4 21.6 22.2 24.1 23.6 24.1 22.2 21.3	9.9 10.0 9.6 12.8 13.2 14.9 15.7 14.9 16.0 17.2 17.3 16.0 16.1 15.6 12.9 12.1 15.5 15.5 15.5 17.0 18.7 18.7 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0 19.0	11.2 12.3 14.1 16.0 18.3 20.4 19.6 19.7 19.8 20.6 21.9 22.1 20.6 20.7 18.1 17.7 15.0 15.1 18.4 18.3 18.1
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	9.2 8.5 7.3 10.3 7.7 7.4 8.7 8.6 9.7 6.9 7.6 5.4 3.5 7.3 10.7 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5	2.7 5.2 4.2 4 1.8 2.7 5.3 2.5 1.8 2.5 1.2 3.8 5.3 5.7 5.9 3.7	5.2 6.9 6.2 6.1 6.9 1.6 4.2 5.5 6.6 3.9 4.2 3.5 2.1 3.8 7.0 6.5 3.9 7.7 6.5 6.7 3.1 6.9	11.5 12.6 12.7 10.4 13.0 14.9 15.3 12.3 8.4 9.9 14.6 15.4 10.0 10.0 6.7 8.3 13.8 16.6 18.1 16.6 19.0 11.8 6.4	5.2 6.1 6.0 7.9 6.2 8.1 7.4 5.3 8.1 4.9 3.0 4.1 4.0 4.9 7.4 10.2 11.8 6.4 3.9 1.8 3.5 5.5	7.8 8.3 9.2 9.4 9.2 9.7 11.3 9.4 6.0 6.6 9.7 11.3 6.6 4.8 9.2 11.9 13.8 14.7 8.0 5.5	16.7 16.3 15.6 18.5 17.8 18.7 19.9 19.2 20.0 15.8 16.2 17.9 20.0 18.9 15.1 13.7 19.5 19.7 20.3 18.9 18.3 21.6 22.7	13.1 11.9 12.6 8.9 10.5 10.9 10.6 6.0 8.2 10.0 10.8 9.2 7.0 6.6 12.5 9.6 10.8 6.7 9.1 12.1	14.4 13.7 14.8 14.6 13.5 15.0 14.9 15.1 10.3 12.6 14.5 14.8 11.0 9.9 12.5 16.0 14.5 14.6 15.7 12.1 14.9 17.1 16.7 17.7	11.6 15.7 19.5 19.6 24.1 24.8 23.8 25.8 26.3 26.4 28.3 27.6 24.8 26.1 22.2 21.3 17.9 18.5 21.4 21.6 22.2 24.1 23.8	9.9 10.0 9.6 12.8 13.2 14.9 15.7 14.9 16.0 15.9 16.6 17.2 17.3 16.0 16.1 15.6 12.9 12.1 15.5 15.0 14.1	11.2 12.3 14.1 16.0 18.3 20.4 19.6 19.7 19.8 20.6 21.9 22.1 20.6 20.7 18.1 17.7 15.0 15.1 18.4 18.3 18.1
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	9.2 8.5 7.3 10.3 7.7 7.4 8.7 8.6 6.9 7.6 5.4 3.5 7.3 10.7 8.5 7.6 8.5 9.5 8.5 9.5	2.7 5.2 4.2 .4 1.8 2.7 5.3 2.5 1.8 2.5 1.2 3.8 5.3 5.7 5.9 3.7 5.5 1.4 .6	5.2 6.9 6.2 6.1 6.9 1.6 4.2 5.5 6.6 3.9 4.2 3.5 2.1 3.8 7.0 6.5 3.9 7.7 6.5 6.7 7.3 1.6	11.5 12.6 12.7 10.4 13.0 14.9 15.3 12.3 8.4 9.9 14.6 15.4 10.0 10.0 6.7 8.3 13.8 16.6 19.0 11.8 6.4 5.5 6.3 10.8 12.8 14.4	5.2 6.1 6.0 7.9 6.2 8.1 7.4 5.2 4.4 3.6 5.3 8.1 4.9 7.4 10.2 10.7 11.8 6.4 3.3 5.5 8.1	7.8 8.3 9.2 9.4 9.2 9.7 11.3 9.4 6.0 6.6 9.7 11.3 6.6 6.1 4.8 5.2 11.9 13.8 14.7 8.0 5.5 3.7 4.9 8.0 9.9 9.1	16.7 16.3 15.6 18.5 17.8 18.7 19.9 19.2 20.0 15.8 16.2 17.9 20.0 18.9 15.1 13.7 19.5 19.7 20.3 18.9 18.3 21.6 22.7	13.1 11.9 12.0 8.9 10.5 10.9 10.6 7.6 6.0 8.2 10.0 10.8 9.2 7.0 6.6 12.5 9.6 10.8 6.7 9.1 12.1 11.6 12.8 12.4 11.6 12.8 12.4 11.6	14.4 13.7 14.8 14.6 13.5 15.0 14.9 15.1 10.5 14.5 14.8 11.0 9.9 12.5 16.0 14.5 14.6 15.7 12.1 14.9 17.1 16.7 17.7 17.4 16.1 18.2	11.6 15.7 19.5 19.6 24.1 24.8 23.8 26.3 26.4 28.3 27.6 24.8 26.1 22.2 21.3 17.9 18.5 21.4 21.6 22.2 22.2 21.3	9.9 10.0 9.6 12.8 13.2 14.9 15.7 14.9 16.6 17.2 17.3 16.0 16.1 15.6 12.9 12.1 15.5 14.1 15.7 17.0 18.7 17.0 18.3 16.4	11.2 12.3 14.1 16.0 18.3 20.4 19.6 19.7 19.8 20.6 21.9 22.1 20.6 20.7 18.1 17.7 15.0 15.1 18.4 18.3 18.1

07137500 ARKANSAS RIVER NEAR COOLIDGE, KS--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBE	R
1 2 3 4 5	25.9 24.6 22.4 22.3 21.3	18.0 18.2 18.9 16.5 16.3	21.7 21.5 20.3 18.9 18.6	27.4 27.7 28.6 29.1 27.7	22.8 22.1 23.1 23.1 23.3	25.1 24.8 25.7 26.2 25.7	29.1 28.9 28.5 27.8 27.9	23.2 24.0 23.9 23.1 22.3	25.9 26.5 26.2 25.4 25.1	26.7 26.9 26.5 27.1 26.0	17.9 18.1 18.2 17.8 18.6	22.2 22.2 22.1 22.3 21.9
6 7 8 9 10	24.7 24.0 27.2	18.2 20.4 20.9	20.8 21.9 19.9 21.9 23.8	27.5 28.5 29.4 29.8 29.6	22.3 22.4 22.9 24.2 23.6	24.9 25.4 26.0 27.0 26.6	28.2 27.3 27.0 26.3 24.9	23.6 23.5 22.3 21.9 21.4	25.9 25.6 24.7 24.2 23.0	27.2 22.1 16.3 23.2	17.9 16.3 13.2 13.4	22.3 18.0 14.5 15.7 18.0
11 12 13 14 15	29.3 27.4 26.0 	21.2 20.5 17.5 	25.0 23.7 21.4 19.2 19.9	30.1 28.9 27.6 27.0 27.6	24.3 23.8 23.4 22.6 23.4	27.1 26.4 25.7 25.0 25.3	26.3 27.9 27.5 26.0 26.1	21.6 22.6 23.2 22.4 21.8	23.6 25.1 25.3 24.2 23.8	25.2 25.7 25.2 27.1 22.7	15.4 15.8 16.3 17.5 18.5	19.9 20.5 20.6 21.7 20.2
16 17 18 19 20	27.9 26.3 27.6 23.8 23.0	16.5 18.7 16.5 15.9 16.5	21.9 22.1 21.7 19.5 19.4	29.3 27.3 28.2 28.2 28.6	23.5 23.5 23.2 21.0 23.7	26.2 25.7 25.8 25.6 26.2	25.3 26.9 27.9 27.8 26.9	20.6 20.4 21.0 20.0 21.0	23.1 23.4 24.4 23.9 23.9	24.4 22.9 22.7 23.7 23.2	17.1 18.9 18.2 18.0 18.2	20.0 20.8 20.2 20.6 20.7
21 22 23 24 25	25.3 27.1 28.9 28.1 27.8	18.4 20.0 20.8 21.4 21.7	21.4 23.4 24.7 24.7 24.7	29.4 30.0 30.0 29.4 29.2	23.9 24.4 25.4 24.2 23.9	26.6 27.2 27.6 26.7 26.4	26.0 26.2 27.9 29.1 25.1	19.5 20.6 19.5 20.0 20.7	22.8 23.3 23.3 24.2 21.9	23.5 23.8 22.0 20.5 20.7	17.0 17.1 15.7 13.3 12.8	20.2 20.3 18.8 16.9 16.6
26 27 28 29 30 31	27.3 26.7 27.5 28.2 28.0	22.4 21.6 21.7 22.7 22.9	24.8 24.2 24.6 25.4 25.4	28.3 27.4 29.2 29.6 28.5 27.5	24.3 23.2 23.8 24.6 24.5 22.7	26.2 25.2 26.4 27.0 26.5 25.0	26.9 26.4 26.5 27.7 26.1	18.7 18.4 19.0 18.9	22.2 22.7 22.3 22.6 23.0 22.5	21.6 23.7 22.6 21.4 20.9	13.3 14.5 15.4 14.5 14.8	17.3 18.9 18.9 17.7 17.7
MONTH	29.3	15.9	22.2	30.1	21.0	26.0	29.1	18.4	24.0	27.2	12.8	19.6
YEAR	30.1	.4	14.8									

07138000 ARKANSAS RIVER AT SYRACUSE, KS

LOCATION.--Lat $37^{\circ}57^{\circ}58^{\circ}$, long $101^{\circ}45^{\circ}23^{\circ}$, in NW $^{1}/_{4}$ SE $^{1}/_{4}$ NW $^{1}/_{4}$ sec.18, T.24 S., R.40 W., Hamilton County, Hydrologic Unit 11030001, on left bank at downstream side of bridge on U.S. Highway 270, 0.5 mi south of Syracuse, and at mile 1,080.9.

DRAINAGE AREA.--25,763 mi^2 , of which 1,857 mi^2 is probably noncontributing.

PERIOD OF RECORD.--August 1902 to September 1906 (published as "near Syracuse"), October 1920 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 3,209.32 ft above sea level. See WSP 1921 for history of changes prior to Nov. 15, 1956.

REMARKS.--Records good. Flow moderately regulated since Oct. 1948 by John Martin Reservoir (station 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in October 1908 reached a stage of about 11.7 ft from information by local newspaper, discharge, about 87,000 ft³/s.

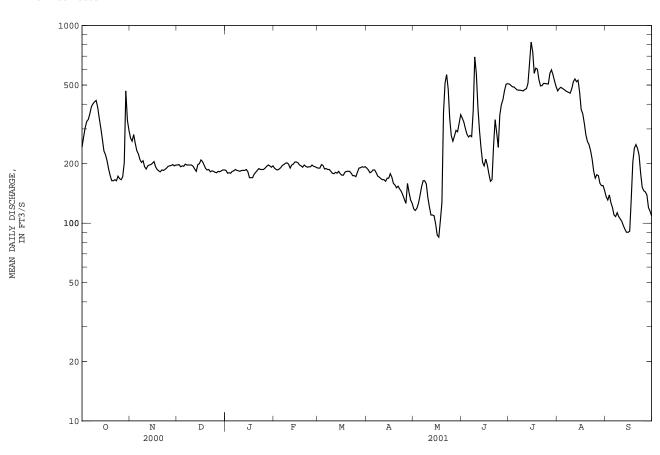
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		DISCHA	KGE, COBI	C FEET FE		Y MEAN V		ER 2000 IV	J SEFIEMD	EK 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2	242 273	270 260	197 198	185 179	190 187	190 190	190 186	118 116	340 325	506 499	467 480	136 131
3	304	281	193	180	186	198	180	119	301	490	487	139
4	327	254	195	179	188	196	182	126	282	489	481	127
5	335	233	194	183	191	188	186	138	273	481	475	120
6	358	224	199	184	196	189	186	153	278	473	468	110
7	389	210	197	187	198	187	180	164	274	471	463	108
8 9	402 411	203 207	197 197	185 184	201 202	187 183	173 171	164 158	371 694	471 469	459 455	113 108
10	418	193	197	183	199	179	168	135	570	467	480	105
11 12	386 340	188 195	194 188	185 185	190 197	178 181	166 166	121 110	386 295	475 479	520 537	102 97
13	340	195	183	185	197	179	163	110	295	511	520	97
14	266	198	198	187	204	183	169	109	203	646	529	90
15	232	201	200	182	204	178	169	99	195	826	460	90
16	222	205	209	e170	202	175	178	87	211	739	376	91
17	207	193	205	e170	197	175	171	85	197	573	358	133
18	188	187	197	e170	195	181	159	103	178	609	320	204
19	174	184	189	177	192	183	156	127	163	601	280	240
20	164	182	186	181	197	183	151	362	166	533	259	250
21	164	186	187	185	194	183	154	512	246	495	250	239
22	166	185	182	189	192	179	149	565	334	497	233	221
23 24	164 173	187 190	184 183	187 187	193 193	174 174	145 139	478 337	287 242	510 509	211 183	179 152
25	168	194	181	187	193	174	132	277	353	509	169	146
26	166	195	180	190	194	181	126	260	398	506	176	144
27 28	172 203	196 198	183 182	194 197	193 191	190 191	159 143	276 295	422 469	573 597	174 159	139 120
28 29	467	198	184	197	191	191	131	295	505	563	155	115
30	331	197	186	192		192	126	320	508	523	155	109
31	295		186	195		193		354		490	146	
MEAN	271	206	191	184	195	184	162	215	324	535	351	138
MAX	467	281	209	197	204	198	190	565	694	826	537	250
MIN	164	182	180	170	186	172	126	85	163	467	146	90
AC-FT	16680	12270	11760	11340	10830	11320	9630	13230	19250	32880	21590	8230

07138000 ARKANSAS RIVER AT SYRACUSE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	195 2401 1924 .31 1975	152 1200 1942 .75 1975	151 669 1924 .69 1975	164 1100 1924 1.19 1979	167 976 1924 .98 1978	146 641 1998 1.70 1978	297 5962 1942 3.24 1979	459 5070 1942 5.42 1937	803 9499 1921 7.04 1954	458 3030 1921 2.10 1940	493 4365 1923 .50 1974	243 1720 1923 .19 1974
SUMMARY	STATIST	ICS	FOR 2	2000 CALEI	NDAR YEAR	FC	OR 2001 WA	TER YEAR		WATER YE	ARS 1903	- 2001
	MEAN ANNUAL I			347			247			300 1950 14.0		1942 1979
HIGHEST	DAILY M	EAN		983	Jul 19		826	Jul 15		109000	Jun	18 1965
LOWEST	DAILY ME	AN		116	Sep 20		85	May 17		.03	Sep	27 1974
ANNUAL	SEVEN-DA	Y MINIMUM		121	Sep 18		95	Sep 10		.06		21 1974
	I PEAK FLO						1020	Jul 16		174000		17 1965
	I PEAK ST						6.53			19.75		17 1965
	ANEOUS LO						82	May 17		.00	Aug	17 1946
	RUNOFF (- ,		251600			179000			217600		
	ENT EXCE			694			480			527		
	ENT EXCE			276			193			131		
90 PERC	ENT EXCE	EDS		181			136			7.4		



07138020 ARKANSAS RIVER AT KENDALL, KS

LOCATION.--Lat $37^{\circ}55^{\circ}48^{\circ}$, long $101^{\circ}32^{\circ}56^{\circ}$, in SW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.25, T.24 S., R.39 W., Hamilton County, Hydrologic Unit 11030001, on left upstream side of county road bridge, 0.24 mi south of Kendall, and at mile 1,066.7.

DRAINAGE AREA.--26,028 mi^2 , of which 1,886 mi^2 is probably noncontributing.

PERIOD OF RECORD.--April 1979 to September 1982. June 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,130.00 ft above sea level.

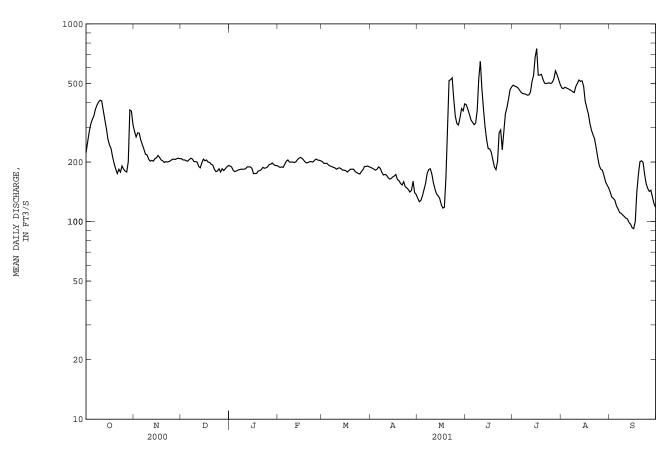
REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow moderately regulated since October 1948 by John Martin Reservoir (station 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, groundwater withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

		DISCHA	RGE, CUBI	C FEET PE			YEAR OCTOBER	2000 TO	SEPTEMBER	2001		
					DAII	LY MEAN	VALUES					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	223	286	208	191	190	201		131	390	490	475	141
2	252	268	205	189	188	197		126	370	484	470	133
3	283	281	205	182	189	197		128	349	481	478	131
4	311	280	203	179	188	197		135	327	475	474	128
5	328	258	202	180	195	193	184	145	318	463	470	120
6	342	245	206	182	202	191		156	309	451	465	116
7	370	232	209	183	205	190		175	315	444	460	111
8	388	219	207	184	e200	188		183	365	443	454	110
9	402	217	201	184	e200	187		185	531	441	449	108
10	411	207	201	184	e200	184	173	174	646	436	482	106
11	408	202	200	185	199	186		157	468	437	500	104
12	366	204	190	189	200	187		146	371	450	520	103
13	328	202	187	189	205	185		138	302	511	512	99
14	296	208	198	189	209	182		135	260	547	515	97
15	261	210	207	186	211	182	168	131	234	676	484	93
16	244	216	203	e175	209	181		122	233	749	407	92
17	234	211	205	e175	205	178	173	117	224	550	377	100
18	212	205	200	e175	200	181	. 163	118	205	551	351	141
19	196	203	199	180	198	184		166	189	556	314	173
20	184	199	195	181	199	184	156	292	183	525	290	201
21	175	201	193	183	201	184		517	202	502	275	203
22	184	200	184	188	201	179	159	522	281	499	262	199
23	178	201	179	186	200	177	150	533	291	501	237	173
24	191	203	180	187	204	175	148	417	231	503	211	155
25	184	206	185	189	207	174	145	341	284	499	192	147
26	180	207	178	194	205	179	141	313	351	506	184	142
27	178	206	185	195	204	183	144	308	377	527	182	144
28	201	208	181	198	203	190	160	335	416	579	171	133
29	367	209	185	194		190	140	373	465	554	159	123
30	362	208	189	192		191	. 137	363	480	524	153	118
31	309		192	192		189		394		495	148	
TOTAL	8548	6602	6062	5760	5617	5766	4958	7476	9967	15849	11121	3944
MEAN	276	220	196	186	201	186		241	332	511	359	131
MAX	411	286	209	198	211	201	. 189	533	646	749	520	203
MIN	175	199	178	175	188	174		117	183	436	148	92
AC-FT	16950	13100	12020	11420	11140	11440	9830	14830	19770	31440	22060	7820

07138020 ARKANSAS RIVER AT KENDALL, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2001, BY WATER YEAR (WY)

OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN 79.0 MAX 276 (WY) 2001 MIN .000 (WY) 1980	69.9 220 2001 .000 1980	70.8 196 2001 .000 1980	71.8 186 2001 .000 1980	76.7 201 2001 5.24 1980	78.5 186 2001 19.8 1980	77.2 165 2001 16.9 1982	115 241 2001 22.7 1982	276 592 2000 17.6 1981	411 637 2000 97.4 1981	292 466 2000 149 1982	128 171 2000 30.0 1980
SUMMARY STATISTIC	CS				WATER YE	ARS 1980	- 2001				
ANNUAL TOTAL ANNUAL MEAN HIGHEST ANNUAL ME HIGHEST DAILY MEA LOWEST DAILY MEA ANNUAL SEVEN-DAY MAXIMUM PEAK STA INSTANTANEOUS LO MAXIMUM PEAK STA INSTANTANEOUS LO TO PERCENT EXCEE 50 PERCENT EXCEE	AN AN N MINIMUM W GE GE W FLOW C-FT) DS			9 86 18180 4' 20	51 49 92 98 56 8.95	Jul 16 Sep 16 Sep 11 Jul 16 Jul 16 Sep 16			130 251 64.1 984 .00 1060 9.37 .00 94340 469 68 3.8	Oct Oct Jul Jul	2001 1981 19 2000 1 1979 1 1979 19 2000 19 2000 19 y years



07138070 ARKANSAS RIVER AT DEERFIELD, KS

LOCATION.--Lat $37^{\circ}58^{\circ}11^{\circ}$, long $101^{\circ}17^{\circ}42^{\circ}$, in NW $^{1}/_{4}$ SW $^{1}/_{4}$ NE $^{1}/_{4}$ sec.14, T.24 S., R.35 W., Kearney County, Hydrologic Unit 11030001, on right downstream end of bridge on paved county road about 0.75 mi southwest of Deerfield and at mile 1,039.8.

DRAINAGE AREA.--26,964 mi².

PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,920.00 ft above sea level.

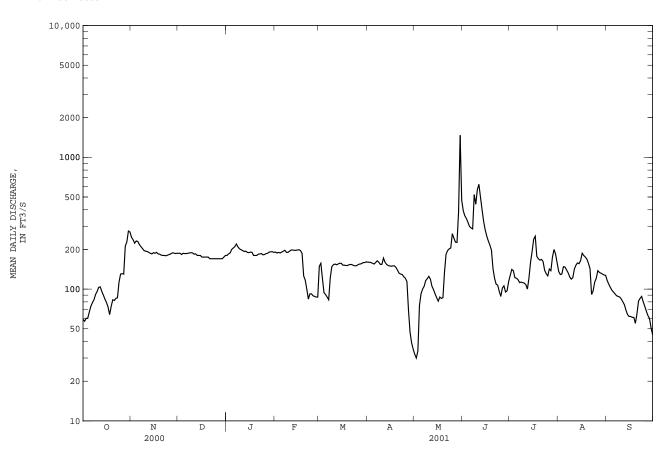
REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow moderately regulated since October 1948 by John Martin Reservoir (station 0713000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, groundwater withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

		DISCHA	RGE, CUBI	C FEET PEI		WATER YEA		R 2000 TC	SEPTEMBE	R 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	247	187	e180	191	149	160	32	393	127	136	116
2	57	237	187	e185	188	157	160	30	360	141	129	109
3	60	223	183	e188	190	120	159	34	343	138	130	103
4	60	232	187	e200	188	94	157	75	321	122	148	98
5	67	230	186	e205	191	91	155	92	299	121	147	95
6	74	218	186	e210	194	87	159	100	291	118	140	92
7	79	210	187	220	197	83	164	105	286	112	133	89
8	83	203	188	209	e190	122	160	116	521	113	124	88
9	91	196	189	202	e190	148	154	120	441	112	119	87
10	96	194	188	199	194	153	154	125	569	111	122	84
11	103	193	184	196	198	155	172	119	624	108	142	80
12	104	190	e185	193	198	153	160	105	499	100	152	76
13	96	187	e180	194	197	155	154	99	402	122	158	69
14	90	185	e180	190	e197	157	151	92	327	160	156	64
15	84	189	e180	189	198	157	150	86	282	193	165	62
16 17 18 19 20	79 73 64 74 83	187 190 185 184 181	e175 e175 e175 e175 e175	191 e190 e180 e180	199 196 186 126 117	152 152 151 151 153	149 150 150 146 139	81 87 85 86 134	253 232 216 198 143	239 252 177 170 166	187 180 175 169 157	62 61 61 55 65
21	82	180	e170	184	100	154	132	184	121	168	143	81
22	85	180	e170	185	84	153	130	196	109	162	91	85
23	86	179	e170	186	92	151	129	202	107	139	97	88
24	113	e181	e170	182	92	150	124	205	96	131	113	80
25	130	e183	e170	183	89	151	121	263	88	126	121	74
26 27 28 29 30 31	131 130 212 228 276 271	185 188 188 186 187	e170 e170 e170 e170 e175 e180	186 187 191 192 192 190	88 87 e87 	154 155 156 159 159 161	114 69 47 39 35	244 227 226 385 1470 472	102 106 95 97 114	142 138 175 200 184 158	138 134 132 130 128 127	68 63 60 51 45
MEAN	107	197	179	192	159	143	135	190	268	149	139	77.0
MAX	276	247	189	220	199	161	172	1470	624	252	187	116
MIN	57	179	170	180	84	83	35	30	88	100	91	45
AC-FT	6590	11700	10980	11780	8810	8810	8020	11660	15940	9170	8570	4580

07138070 ARKANSAS RIVER AT DEERFIELD, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	215 309 2000 107 2001	269 317 1999 197 2001	224 277 2000 179 2001	195 206 2000 186 1999	233 312 2000 159 2001	246 386 2000 143 2001	216 263 1999 135 2001	825 2083 1999 190 2001	857 2147 1999 155 2000	303 535 1999 149 2001	389 884 1999 139 2001	157 325 1999 70.3 2000
SUMMARY	SUMMARY STATISTICS ANNUAL MEAN			2000 CALE	NDAR YEAR	FC	OR 2001	WATER YEAR		WATER YE	ARS 1999	- 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN				203			161			345 637 161		1999 2001
				531	Mar 13		1470	May 30		2630		13 1999
	DAILY MEA	AN Z MINIMUM		36 44	Sep 14 Sep 8		30 41	May 2 Apr 27		30 41		2 2001 27 2001
					DCP 0		2410	May 30		2740		24 1999
	MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE						11.			12.32		24 1999
	INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT)			147100			28 116600	May 3		28 249600	May	3 2001
	0 PERCENT EXCEEDS			363			217			431		
	PERCENT EXCEEDS			186			155			216		
90 PERC	ENT EXCEE	EDS		74			81			90		



07139000 ARKANSAS RIVER AT GARDEN CITY, KS

LOCATION.--Lat 37°57'21", long 100°52'37", in NW $^{1}/_{4}$ SE $^{1}/_{4}$ NW $^{1}/_{4}$ sec.19, T.24 S., R.32 W., Finney County, Hydrologic Unit 11030001, on left bank at downstream side of bridge on U.S. Highway 82, 0.5 mi south of Garden City, and at mile 1,024.2.

DRAINAGE AREA.--27,071 mi^2 , of which 2,368 mi^2 is probably noncontributing.

Discharge

PERIOD OF RECORD.--June 1922 to June 1970, October 1986 to current year. July 1970 to September 1986, flood hydrograph record.

GAGE.--Water-stage recorder. Datum of gage is 2,815.43 ft above sea level. Prior to May 9, 1957, water-stage recorder at site 60 ft downstream at datum 9.0 ft higher. May 9, 1957, to July 9, 1964, water-stage recorder at present site at datum 9.0 ft higher. July 9, 1964, to Apr. 8, 1976, water-stage recorder at present site at datum 6.0 ft higher. Apr. 8, 1976, to Sept. 30, 1986, water-stage recorder at present site at datum 3.0 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow moderately regulated since Oct. 1948 by John Martin Reservoir (station 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

Discharge Gage height

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ${\rm ft}^3/{\rm s}$ and maximum (*):

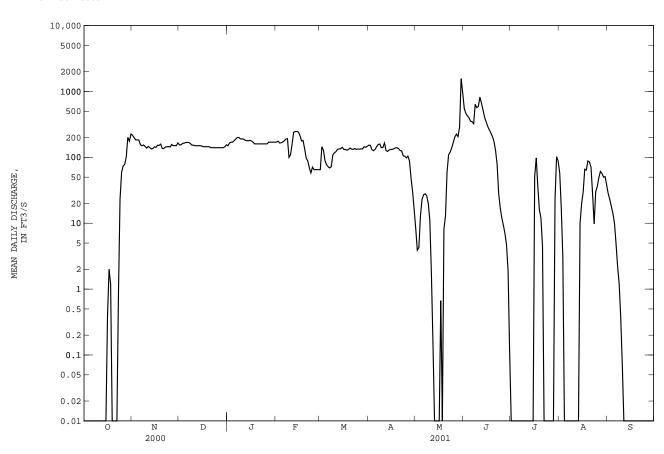
Gage height

Date	Tir	ne	(ft^3/s)		(ft)		Date	Tin	ne	(ft^3/s)	5	(ft)
May 30 Jun 8			*2,580 848		*8.64 7.13		Jun 11	080	00	894		7.16
		DISCHA	RGE, CUBIC	C FEET PE		WATER YEA		ER 2000 TO	O SEPTEMBI	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	216 199 184 184 183	154 155 163 164 168	e150 e165 e170 e170 e180	e170 176 165 166 171	e65 145 128 89 77	153 152 130 126 132	8.2 3.9 4.3 13 23	552 464 428 398 354	.00 .00 .00 .00	58 17 3.0 .00	28 23 18 14 10
6 7 8 9 10	.00 .00 .00 .00	156 150 154 147 138	168 168 161 153 e153	e190 e200 e200 e190 e190	178 189 192 100 110	72 69 72 109 117	145 157 159 140 141	27 28 26 20 11	347 324 638 567 592	.00 .00 .00 .00	.00 .00 .00 .00	4.9 2.2 1.2 .37
11 12 13 14 15	.00 .00 .00 .00	146 141 134 136 144	e150 e150 e150 e150 e150	189 181 179 178 181	161 241 246 247 242	122 132 134 135 142	165 127 123 129 132	1.7 .15 .00 .00	822 663 521 405 344	.00 .00 .00 .00	.00 .00 .00 e10 e20	.00 .00 .00 .00
16 17 18 19 20	.39 2.0 1.2 .00	142 152 152 159 136	e145 e145 e145 e145 e145	177 e170 e160 e160 e160	214 177 180 134 97	132 132 128 132 138	132 135 139 140 136	.00 .67 .01 8.1	294 262 234 207 174	51 98 36 16 12	e30 66 64 88 85	.00 .00 .00 .00
21 22 23 24 25	.00 .00 .84 23	136 144 144 146 143	e140 e140 e140 e140 e140	e160 e160 e160 e160 e160	88 69 58 71 65	133 132 136 132 134	127 125 105 104 98	60 110 120 140 169	127 78 28 17 12	4.5 .00 .00 .00	71 28 9.8 30 36	.00 .00 .00 .00
26 27 28 29 30 31	74 78 102 201 176 226	157 150 151 150 166	e140 e140 e140 e145 e155	e160 e170 e170 e170 e170 e170	65 e65 e65 	133 134 134 145 142 147	104 88 48 30 16	205 225 206 287 1570 952	9.3 7.0 4.7 1.9 .11	.00 .00 .00 23 102 88	49 61 57 50 51 38	.00 .00 .00 .00
MEAN MAX MIN AC-FT	30.4 226 .00 1870	155 216 134 9200	150 168 140 9210	173 200 150 10610	146 247 58 8140	122 147 65 7480	121 165 16 7220	137 1570 .00 8390	296 822 .11 17600	13.9 102 .00 854	29.7 88 .00 1830	3.39 28 .00 202

07139000 ARKANSAS RIVER AT GARDEN CITY, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB	MAR APR	MAY JUN	JUL	AUG SEP
MEAN 129 120 MAX 2751 1023 (WY) 1924 1942 MIN .000 .000 (WY) 1938 1991	125 139 673 843 1924 1998 .000 .000 1991 1992	850 1924 1	114 179 903 5556 1924 1942 .000 .000 1935 1935	279 484 4693 6859 1942 1965 .000 .000 1937 1934	1696 3 1947 1 .000 .	263 112 949 1611 923 1923 000 .000 924 1926
SUMMARY STATISTICS	FOR 2000 CALEND	AR YEAR	FOR 2001 WAT	ER YEAR	WATER YEARS	1923 - 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS	153 585 .00 .00 111300 375 144	Mar 14 Jun 15 Aug 25	114 1570 .00 .00 2580 8.64 .00 82610 195 126	May 30 Oct 1 Oct 1 May 30 May 30 Oct 1	191 1690 .000 104000 .00 130000 16.30 .00 138200 340 23	1942 1992 Jun 19 1965 Oct 1 1922 Oct 1 1922 Jun 19 1965 Jun 19 1965 many years



07139500 ARKANSAS RIVER AT DODGE CITY, KS

LOCATION.--Lat $37^{\circ}44'41"$, long $100^{\circ}01'57"$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.35, T.26 S., R.25 W., Ford County, Hydrologic Unit 11030003, on left bank at downstream side of bridge on Fourteenth Avenue in Dodge City, and at mile 970.9.

DRAINAGE AREA.--30,600 mi^2 , of which 5,583 mi^2 is probably noncontributing.

Discharge

PERIOD OF RECORD.--October 1902 to September 1906 (published as "near Dodge"), September 1944 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected at same site at different datum 1909-32 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 1341: 1903(M), 1904, 1905(M), 1947(M).

GAGE.--Water-stage recorder. Datum of gage is 2,468.71 ft above sea level. Nov. 28, 1902, to Aug. 10, 1906, nonrecording gage at site 0.7 mi downstream at datum about 4.00 ft higher. Sept. 1 to Nov. 5, 1944, nonrecording gage and Nov. 6, 1944, to Sept 30, 1975, recording gage at site 0.7 mi downstream and datum 1.00 ft lower. Oct. 1, 1975, to March 16, 1981, recording gage at site 0.7 mi downstream at datum 4.00 ft lower.

REMARKS.--Records good. Flow moderately regulated since Oct. 1948 by John Martin Reservoir (station 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

Gage height

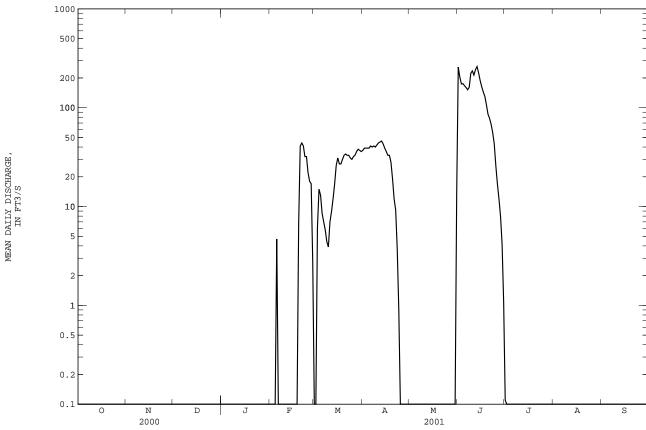
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ${\rm ft}^3/{\rm s}$ and maximum (*): Gage height

Date	Time	(1	Et ³ /s)	cag	(ft)		Date	Time	=	(ft ³ /s)	case	(ft)
Jun 1	0700		*302		*7.67		No peak	greater	than base	discharge.		
		DISCHARGE	, CUBIC	FEET PE		WATER Y	YEAR OCTOBER VALUES	2000 TO	SEPTEMBER	2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 6.1 15 13	37 39 39 39 39	.00 .00 .00 .00	258 204 174 175 167	.11 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
6 7 8 9 10	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	8.5 7.0 5.8 4.4 3.9	41 40 41 40 42	.00 .00 .00 .00	160 152 161 223 236	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
11 12 13 14 15	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	7.0 8.9 12 17 26	44 45 46 43 39	.00 .00 .00 .00	214 243 261 225 188	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
16 17 18 19 20	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 6.7 41	31 27 27 30 33	36 33 33 28 19	.00 .00 .00 .00	163 144 130 107 86	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
21 22 23 24 25	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	44 41 32 32 22	34 33 33 31 30	12 9.2 3.7 .90 .00	.00 .00 .00 .00	78 68 56 43 26	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
26 27 28 29 30 31	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	18 17 2.7 	32 33 36 38 37 36	.00 .00 .00 .00	.00 .00 .00 .00 .00	17 12 8.0 4.2 1.1	.00 .00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
MEAN MAX MIN AC-FT	.000	.000	.000 .00 .00	.000	9.32 44 .00 518	21.1 38 .00 1300	26.3 46 .00 1560	.45 14 .00 28	133 261 1.1 7900	.004 .11 .00 .2	.000	.000 .00 .00

07139500 ARKANSAS RIVER AT DODGE CITY, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	94.5	80.4	84.1	94.8	115	116	149	246	401	140	102	71.7
MAX	1986	455	351	651	590	502	3130	5771	5370	1848	851	1146
(WY)	1905	1947	1966	1998	1998	1966	1905	1905	1965	1947	1965	1965
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1904	1977	1977	1977	1977	1977	1981	1981	1981	1983	1976	1903
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	AR YEAR	F	OR 2001 WA	TER YE	AR.	WATER YEAR	RS 1903	- 2001
ANNUAL	ANNUAL MEAN HIGHEST ANNUAL MEAN			75.7			15.6			141		
HIGHEST	HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN									1354		1905
LOWEST	ANNUAL MI	EAN								.000		1990
HIGHEST	DAILY M	EAN		368	Mar 24		261	Jun I	.3	70300	Jun 2	20 1965
LOWEST	DAILY MEA	AN		.00	Jun 15		.00	Oct	1	.00	Apr	8 1903
ANNUAL	SEVEN-DAY	Y MINIMUM		.00	Jun 15		.00	Oct	1	.00	Apr 1	0 1903
MAXIMUM	I PEAK FLO	WC					302	Jun	1	82000	Jun 1	9 1965
MAXIMUM	PEAK STA	AGE					7.67	Jun	1	14.68	Jun 1	9 1965
INSTANT	ANEOUS LO	OW FLOW					.00	Oct	1	.00	many	years
ANNUAL	RUNOFF (A	AC-FT)		54940			11310			102200		
10 PERC	ENT EXCE	EDS		269			39			269		
50 PERC	ENT EXCE	EDS		.00			.00			39		
90 PERC	ENT EXCE	EDS		.00			.00			.00		



07140000 ARKANSAS RIVER NEAR KINSLEY, KS

LOCATION.--Lat $37^{\circ}55^{\circ}33^{\circ}$, long $99^{\circ}22^{\circ}31^{\circ}$, in SW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.26, T.24 S., R.19 W., Edwards County, Hydrologic Unit 11030004, on right bank at downstream side of bridge on U.S. Highway 50, 2.0 mi east of Kinsley, and at mile 920.3.

DRAINAGE AREA.--31,066 mi^2 , of which 5,660 mi^2 is probably noncontributing.

PERIOD OF RECORD.--September 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,141.64 ft above sea level. Prior to Nov. 10, 1944, nonrecording gage, and Nov. 10, 1944, to Dec. 31, 1975, water-stage recorder, both at present site and datum 3.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow moderately regulated since 1943 by John Martin Reservoir (station 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

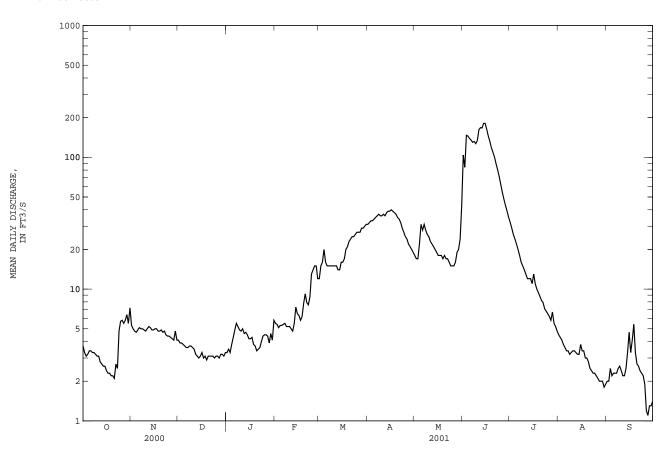
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ${\rm ft}^3/{\rm s}$ and maximum (*):

Date	Time	e	Discharge (ft ³ /s)	Gag	e height (ft)		Date	Time	D:	ischarge ft ³ /s)		neight t)
Jun 15	030	0	*187		*5.87		No peak	greater	than base	discharge.		
		DISCHA	ARGE, CUBIC	FEET PE		WATER YEAR Y MEAN VALU		2000 TO	SEPTEMBER	2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	3.7 3.3 3.1 3.2 3.4	5.3 5.0 4.8 4.7 4.9	4.1 3.9 3.9 3.8 3.7	3.3 3.5 3.3 3.8 4.3	5.5 5.4 5.1 5.3 5.3	12 15 16 20 16	31 32 33 33 34	18 17 17 22 31	104 84 147 145 139	32 29 26 24 22	4.5 4.3 4.1 3.8 3.6	2.0 2.0 2.5 2.2 2.3
6 7 8 9 10	3.4 3.3 3.3 3.2 3.1	5.1 5.0 5.0 4.9 4.8	3.6 3.6 3.7 3.7 3.6	4.9 5.5 5.2 4.9 4.8	5.4 5.5 e5.2 e5.2	15 15 15 15 15	35 36 37 36 36	28 31 28 26 25	135 130 132 127 134	20 18 16 15 14	3.4 3.4 3.2 3.3 3.4	2.3 2.3 2.5 2.6 2.4
11 12 13 14 15	3.1 2.8 2.7 2.6 2.6	5.0 5.2 5.1 4.9 4.9	3.5 3.2 3.1 3.0 3.1	5.0 4.6 4.7 4.5 4.2	5.0 4.8 5.5 7.3 6.5	15 15 14 14 16	37 36 38 39 39	23 22 21 20 19	162 168 167 181 181	13 12 12 12 11	3.4 3.3 3.2 3.2 3.8	2.2 2.2 2.5 3.3 4.7
16 17 18 19 20	2.4 2.3 2.3 2.2 2.2	5.0 5.0 4.8 4.8 4.9	3.3 3.0 3.1 2.9 3.1	4.2 4.3 3.8 3.7 3.4	6.3 5.8 6.2 7.8 9.2	16 17 20 21 23	40 39 38 37 35	18 18 18 17 18	163 145 132 118 109	13 11 10 9.4 8.8	3.4 3.4 3.0 3.0 2.8	3.3 4.1 5.4 3.3 2.7
21 22 23 24 25	2.1 2.7 2.5 4.8 5.7	4.7 4.8 4.5 4.4 4.4	3.1 3.1 3.1 3.0 3.1	3.5 3.6 4.0 4.4 4.5	7.9 7.6 8.7 13	24 25 25 26 27	34 32 29 27 25	17 17 16 15 15	100 89 80 71 62	8.2 7.9 7.1 6.8 6.5	2.5 2.4 2.3 2.3 2.2	2.6 2.4 2.3 2.2 1.9
26 27 28 29 30 31	5.8 5.5 5.8 6.4 5.5 7.2	4.3 4.2 4.1 4.8 4.1	3.1 3.0 3.2 3.2 3.1 3.3	4.5 4.4 3.9 4.6 4.1 5.8	15 15 12 	27 27 29 29 30 31	24 22 21 20 19	15 16 19 20 24 43	54 48 43 39 35	6.2 5.8 6.7 5.5 5.2 4.8	2.1 2.0 2.0 2.0 1.8 1.9	1.2 1.1 1.3 1.3 1.4
MEAN MAX MIN AC-FT	3.62 7.2 2.1 223	4.78 5.3 4.1 284	3.33 4.1 2.9 205	4.30 5.8 3.3 264	7.53 15 4.8 418	20.2 31 12 1240	32.5 40 19 1930	21.1 43 15 1300	114 181 35 6790	12.9 32 4.8 791	3.00 4.5 1.8 184	2.48 5.4 1.1 148

07140000 ARKANSAS RIVER NEAR KINSLEY, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX	85.9 736	93.8 465	94.8 399	105 599	127 610	133 585	133 901	179 2189	283 3937	158 1985	98.8 765	97.6 1154
(WY)	1966	1966	1966	1998	1998	1966	1973	1951	1965	1947	1965	1965
MIN	.14	.007	.000	.000	.000	.000	.000	.089	.17	.013	.21	.23
(WY)	1993	1995	1995	1995	1995	1995	1995	1992	1992	1986	1994	1991
SUMMARY	SUMMARY STATISTICS			2000 CALEN	DAR YEAR	FC	OR 2001 WA	TER YEAR		WATER YE	ARS 1945	- 2001
ANNUAL	ANNUAL MEAN HIGHEST ANNUAL MEAN			86.3			19.0			132		
	HIGHEST ANNUAL MEAN									608		1951
	LOWEST ANNUAL MEAN									.17		1992
	DAILY M			372	Mar 24		181	Jun 14		36000		21 1965
	DAILY ME			2.1	Oct 21		1.1	Sep 27		.00		31 1982
		MUMINIM Y		2.3	Oct 15		1.5	Sep 24		.00		31 1982
	PEAK FLO						187	Jun 15		49800		21 1965
	PEAK ST						5.87	Jun 15		17.60		21 1965
	INSTANTANEOUS LOW FLOW						1.0	Sep 27		.00	Jul	28 1977
	RUNOFF (62660			13780			95890		
	ENT EXCE			234			37			278		
	ENT EXCE			34			5.3			57		
90 PERC	ENT EXCE	EDS		3.3			2.5			1.0		



07140850 PAWNEE RIVER NEAR BURDETT, KS

LOCATION.--Lat $38^{\circ}12^{\circ}24^{\circ}$, long $99^{\circ}38^{\circ}35^{\circ}$, in NW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.21, T.21 S., R.21 W., Hodgeman County, Hydrologic Unit 11030006, on right bank at downstream side of county highway bridge, 3.2 mi north of Gray, 6.5 mi west and 1.2 mi north of Bur-dett.

DRAINAGE AREA. -- 1,091 mi2.

AC-FT

.00

.00

.00

.00

20

5.9

36

4.7

1020

20

4390

PERIOD OF RECORD. -- October 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,102.55 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

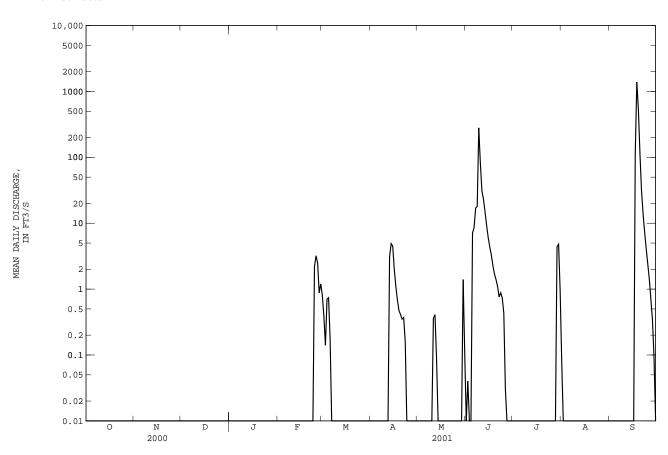
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV DEC JAN FEB MAY JUL AUG .00 .00 .00 . 00 .00 . 81 . 00 .00 .00 .00 .08 .00 1 .00 .00 .39 .04 .00 .00 .00 .00 .00 .00 .00 .00 3 .00 .00 0.0 0.0 0.0 .14 .00 0.0 .00 .00 0.0 .00 .70 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .74 7.1 .00 .00 .00 .00 .00 6 .00 .00 .00 .17 .00 .00 8.6 .00 .00 .00 .00 .00 .00 .00 .00 .00 e.00 .00 .00 .00 17 .00 .00 .00 8 0.0 .00 0.0 0.0 e.00 0.0 0.0 0.0 18 0.0 0.0 0.0 .00 .00 .00 .00 .00 .00 e.00 .00 .00 280 .00 .00 10 .00 .00 .00 .00 .00 .00 .00 .00 82 .00 .00 .00 11 .00 .00 .00 .00 .00 .00 .00 .36 31 .00 .00 .00 12 .00 .00 .00 .00 .00 .00 .00 .41 23 .00 .00 .00 13 3.1 .00 .00 .00 .00 .00 .00 .00 .09 15 .00 .00 14 .00 .00 .00 .00 .00 .00 4.9 .00 9.3 .00 .00 .00 15 .00 .00 .00 .00 .00 .00 4.5 .00 6.1 .00 .00 .00 .00 16 .00 .00 .00 .00 .00 2.0 .00 4.4 .00 .00 .00 17 18 .00 .00 3.3 .00 115 .00 .00 .00 .00 1.1 .00 .00 1390 .00 .00 .00 .00 .68 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 20 .00 .00 .00 .00 .00 .00 .41 .00 1.4 .00 .00 113 21 .00 .00 .00 e.00 .00 .35 .00 .00 31 .00 1.1 .00 .00 e.00 e.00 .00 .37 .76 .88 .00 14 7.3 22 .00 .00 .00 .00 23 .00 .00 .00 .00 .00 .00 .00 25 .00 .00 .00 .00 3.2 .00 .00 .00 .43 .00 .00 2.4 26 .00 .00 .00 .00 2.5 .00 .00 .00 .03 .00 .00 1.4 27 0.0 .00 .00 0.0 88 .00 0.0 0.0 .00 .00 0.0 .69 .34 1.2 28 .00 .00 .00 .00 .00 .00 .00 .00 29 .00 .00 .00 .00 .00 .00 .00 .00 .00 .09 .00 30 0.0 0.0 0.0 ___ 0.0 .00 1.4 .00 4 8 0.0 .00 31 .00 .00 .11 .00 .00 .95 .00 MEAN 000 000 000 000 36 095 60 076 17 1 33 003 73 8 .00 .00 .00 3.2 .81 4.9 280 4.8 1390 MAX .00 1.4 .08 MIN .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00

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07140850 PAWNEE RIVER NEAR BURDETT, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	1.98 10.9 1994 .000 1982	2.67 31.5 1997 .000 1982	1.32 8.79 1998 .000 1982	1.50 10.1 1998 .000 1982	4.80 71.1 1993 .000 1982	8.65 100 1993 .000 1983	10.7 106 1987 .000 1982	7.12 55.0 1996 .000 1982	11.9 89.1 1996 .000 1982	41.2 539 1993 .000 1983	24.2 166 1997 .000 1983	14.6 73.8 2001 .000 1982
SUMMARY	STATISTI	ICS	FOR 2	2000 CALENI	DAR YEAR	FC	OR 2001 WA	TER YEAR		WATER YEA	RS 1982	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT	ANNUAL ME ANNUAL ME DAILY ME SEVEN-DAY PEAK FLO PEAK STA ANEOUS LO	EAN EAN AN MINIMUM DW AGE DW FLOW		4.18 388 .00 .00	Jul 5 Jun 16 Jun 16		7.59 1390 .00 .00 1660 19.11 .00	Sep 18 Oct 1 Oct 1 Sep 18 Sep 18		10.9 72.3 .000 3830 .00 .00 4290 27.38	Jul 2 Oct Oct Jul 2 Jul 2	1993 1988 1 1993 1 1981 1 1981 1 1993 1 1993 1y days
10 PERC 50 PERC	INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS			3030 4.5 1.5 .00			5500 1.3 .00			7930 9.9 .00 .00		



07141175 BUCKNER CREEK NEAR BURDETT, KS

LOCATION.--Lat $38^{\circ}09'45"$, long $99^{\circ}38'33"$, in NW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.4, T.22 S., R.21 W., Hodgeman County, Hydrologic Unit 11030006, on right bank at downstream side and 100 ft south of bridge 4 mi east of Hanson and 0.2 mi north or 7 mi west of Burdett and 0.2 north, and at mile 8.5.

DRAINAGE AREA. -- 735 mi².

PERIOD OF RECORD.--October 1995 to current year.

GAGE.--Water-stage recorders. Datum of gage is 2,098.00 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

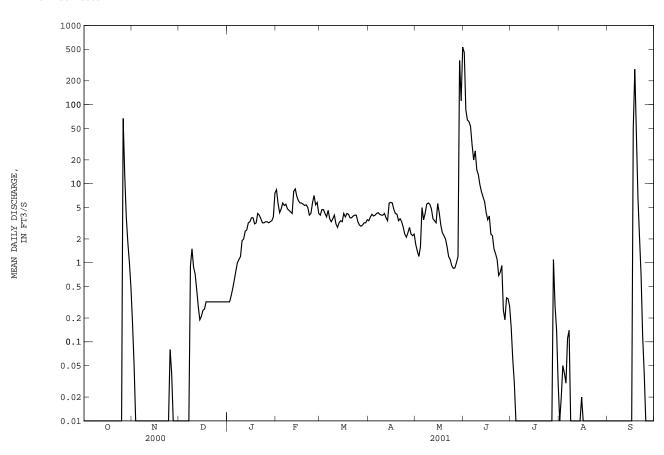
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ${\rm ft}^3/{\rm s}$ and maximum (*):

Date	Tim	e	Discharge (ft ³ /s)	e Gag	ge height (ft)		Date	Tin	ne	Discharge (ft ³ /s)		e height (ft)
Jun 1	050	0	*782	*	14.96		Sep 18	02	00	590	-	L3.35
		DISCHA	RGE, CUBI	C FEET PE		WATER YI Y MEAN VA	EAR OCTOBE	R 2000 T	O SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	.17 .05 .01 .00	.00 .00 .00 .00	e.32 e.32 e.38 e.47 e.60	8.4 5.6 4.3 4.8 5.7	4.0 4.7 4.7 4.2 3.8	3.4 3.8 4.1 3.9 4.0	1.7 1.4 1.2 1.6 5.0	456 86 64 61 53	.15 .06 .03 .01	.00 .02 .05 .04	.00 .00 .00 .00
6 7 8 9 10	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 e.91 e1.5 .88	e.78 e1.0 e1.1 e1.2 e1.9	5.3 5.5 e4.8 e4.6 e4.4	4.6 3.6 3.3 3.6 4.0	4.2 4.3 4.1 4.0 4.0	3.5 4.2 5.5 5.7 5.5	31 20 26 15 13	.00 .00 .00 .00	.11 .14 .01 .00	.00 .00 .00 .00
11 12 13 14 15	.00 .00 .00 .00	.00 .00 .00 .00	.72 .46 .28 .19	e2.0 e2.5 e2.6 e3.2 e3.3	4.2 8.0 8.6 6.9 6.1	3.1 2.8 3.2 3.4 3.3	4.2 3.7 3.4 5.7 5.8	4.8 3.6 3.4 3.2 5.6	9.7 7.9 6.8 5.9 4.3	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
16 17 18 19 20	.00 .00 .00 .00	.00 .00 .00 .00	.25 .26 .32 e.32 e.32	3.7 3.7 3.1 3.2 4.2	5.7 5.7 5.5 e5.3 e5.4	4.2 3.8 4.2 4.1 3.7	5.7 4.7 4.2 4.1 3.4	4.3 3.0 2.4 2.2 2.0	3.5 3.9 2.3 2.2 1.5	.00 .00 .00 .00	.00 .00 .00 .00	.00 50 280 42 6.6
21 22 23 24 25	.00 .00 .00 .00	.00 .00 .00 .00	e.32 e.32 e.32 e.32 e.32	4.0 3.6 3.2 3.2 3.3	5.0 4.0 4.2 5.7 7.1	3.7 3.9 4.0 4.0 3.3	3.6 3.3 2.8 2.3 2.1	1.6 1.2 1.1 .92 .85	1.3 1.1 .69 .76	.00 .00 .00 .00	.00 .00 .00 .00	2.1 .70 .12 .04
26 27 28 29 30 31	67 13 3.8 1.8 1.0	.04 .00 .00 e.00 .00	e.32 e.32 e.32 e.32 e.32	3.3 3.2 e3.3 e3.4 3.8 7.6	5.4 5.8 e4.2 	3.0 2.9 3.0 3.2 3.2	2.4 2.8 2.3 2.2 2.3	.86 1.0 1.2 362 112 534	.25 .19 .36 .35 .28	.00 .01 1.1 .29 .14	.00 .00 .00 .00	.00 .00 .00 .00
MEAN MAX MIN AC-FT	2.81 67 .00 173	.012 .17 .00 .7	.33 1.5 .00 20	2.63 7.6 .32 162	5.58 8.6 4.0 310	3.68 4.7 2.8 226	3.69 5.8 2.1 220	35.0 534 .85 2160	29.3 456 .19 1740	.059 1.1 .00 3.6	.014 .14 .00 .8	12.7 280 .00 757

07141175 BUCKNER CREEK NEAR BURDETT, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	20.0 81.8 1998 .000 1996	39.1 198 1997 .000 1996	10.1 27.5 1997 .000 1996	11.7 29.6 1998 .000 1996	12.5 32.5 1998 .38 1996	17.7 57.1 1998 .000 1996	17.7 41.9 1998 .000 1996	26.5 44.4 1996 15.8 2000	27.0 63.6 1997 3.50 2000	23.5 93.8 1996 .059 2001	73.4 286 1996 .014 2001	67.7 362 1996 .000 2000
SUMMARY	STATIST	ICS	FOR 2	000 CALEND	AR YEAR	FC	R 2001 WAT	TER YEAR		WATER YEA	RS 1996	- 2001
	MEAN ANNUAL I			5.74			7.97			28.9 68.7 6.16		1996 2000
HIGHEST	DAILY M	EAN		135	Jul 23		534	May 31		2160	Sep	21 1996
	DAILY ME			.00	Jun 21		.00	Oct 1		.00	Oct	1 1995
		Y MINIMUM		.00	Aug 11		.00	Oct 1		.00	Oct	1 1995
	PEAK FLO						782	Jun 1		2360		17 1996
	I PEAK ST						14.96	Jun 1 Oct. 1		24.39		17 1996
	NSTANTANEOUS LOW FLOW NNUAL RUNOFF (AC-FT) 4170						.00 5770	Oct 1		.00 20950	Dec	6 1995
	ENT EXCE	- ,		12			5.7			35		
	ENT EXCE			1.1			.78			7.0		
	ENT EXCE			.00			.00			.00		



07141200 PAWNEE RIVER AT ROZEL, KS

LOCATION.--Lat $38^{\circ}12^{\circ}26^{\circ}$, long $99^{\circ}24^{\circ}18^{\circ}$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.22, T.21 S., R.19 W., Pawnee County, Hydrologic Unit 11030005, on left bank at downstream side of highway bridge, 1.2 mi north of U.S. Highway 156 on county road at west edge of Rozel, 16.6 mi west of Larned, and at mile 30.6.

DRAINAGE AREA.--2,148 mi^2 , of which 138 mi^2 is probably noncontributing.

PERIOD OF RECORD.--April to September 1924 (gage heights and discharge measurements only), October 1924 to September 1995 published as "near Larned," and October 1995 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1177: 1949. WSP 1241: 1927-28(M), 1935, 1940, 1943. WSP 1341: Drainage area.

GAGE.--Water-stage recorders. Datum of gage is 2,040.24 ft above sea level. June 3, 1959, to June 6, 1990, at site 5.8 mi downstream at datum 0.66 ft higher. See WSP 1921 for history of changes prior to June 2, 1959.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

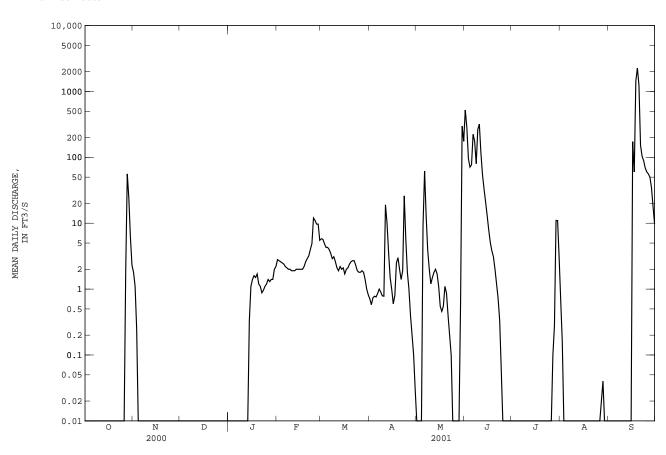
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft^3/s and maximum (*):

Date	Tim	ie	Discharge (ft ³ /s)	Gag	e height (ft)		Date	Tim	e	Discharge (ft ³ /s)	Gag	e height (ft)
Sep 19	020	0	*2,380	*	26.00		No oth	er peak g	reater th	nan base dis	scharge	
		DISCHA	RGE, CUBIC	FEET PE		WATER YEA Y MEAN VAI		R 2000 TC) SEPTEMBI	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	1.8 1.1 .25 .00	.00 .00 .00 .00	.00 .00 .00 .00	2.8 2.7 e2.6 e2.5 e2.4	5.8 5.7 4.9 4.3 4.3	.71 .58 .74 .78	e.01 e.00 e.00 e.00 8.9	523 285 96 71 77	.00 .00 .00 .00	.67 .16 .01 .00	.00 .00 .00 .00
6 7 8 9	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	e2.2 e2.1 e2.0 e2.0 e1.9	4.0 3.5 2.9 3.1 2.6	.86 1.0 .90 .79 .78	62 13 3.9 2.0 1.2	224 175 80 265 319	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
11 12 13 14 15	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .33	e1.9 e1.9 e2.0 e2.0 e2.0	2.1 1.9 2.2 2.0 2.1	19 10 3.6 1.5 .99	1.5 1.8 2.0 1.7	117 55 33 21 13	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
16 17 18 19 20	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	1.4 1.6 e1.5 1.7	e2.0 e2.0 e2.2 e2.6 e2.9	1.7 2.0 2.1 2.4 2.6	e.60 e.80 2.5 3.0 2.0	e.55 e.46 e.55 1.1 .87	7.9 5.1 3.8 3.1 2.0	.00 .00 .00 .00	.00 .00 .00 .00	173 60 1440 2260 1240
21 22 23 24 25	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	1.1 .88 .96 1.1 1.2	e3.2 e4.0 4.9 12	2.7 2.7 2.3 1.9	1.4 1.9 26 5.8 1.8	e.40 e.20 e.10 .00	1.2 .72 .33 .06	.00 .00 .00 .00	.00 .00 .00 .00	153 104 89 69
26 27 28 29 30 31	.00 1.9 56 24 6.1 2.3	.00 .00 .00 .00	.00 .00 .00 .00 .00	1.4 1.3 1.4 1.4 2.0 2.2	9.7 9.7 5.5 	1.8 1.9 1.8 1.4 1.0	e1.0 e.40 e.20 e.10 e.03	.00 .00 .00 .62 299 175	.00 .00 .00 .00	.00 .10 .28 11 11 3.0	.00 .02 .04 .01 .00	56 50 35 18 9.7
MEAN MAX MIN AC-FT	2.91 56 .00 179	.11 1.8 .00 6.2	.000	.77 2.2 .00 47	3.74 12 1.9 208	2.66 5.8 .82 163	3.02 26 .03 180	18.6 299 .00 1150	79.3 523 .00 4720	.82 11 .00 50	.029 .67 .00 1.8	194 2260 .00 11540

07141200 PAWNEE RIVER AT ROZEL, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2001, BY WATER YEAR (WY)

OCT	NOV	DEC	JAN	FEE	3	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN 49.7 MAX 1185 (WY) 1947 MIN .000 (WY) 1940	17.3 320 1997 .000 1940	7.24 63.5 1974 .000 1955	7.11 59.7 1952 .000 1956	11.5 304 1949 .000 1957	<u>.</u>)	30.0 552 1960 .000 1957	48.5 640 1973 .000 1935	96.7 1286 1935 .000 1956	153 2298 1951 .000 1966	158 2264 1958 .000 1976	108 2536 1950 .000 1946	53.6 447 1962 .000 1939
SUMMARY STATIST	rics	FOR	2000 CALENI	DAR YE	AR	F	OR 2001 W	TER YEAR		WATER YE	ARS 1925	- 2001
ANNUAL MEAN HIGHEST ANNUAL LOWEST ANNUAL MIGHEST DAILY MEANNUAL SEVEN-DEMAXIMUM PEAK FINSTANTANEOUS I ANNUAL RUNOFF (14)	MEAN MEAN MAY MINIMUM MOW MAGE MOW FLOW AC-FT)		11.5 252 .00 .00	Jul Aug Aug	6 8 8		25.2 2260 .00 2380 26.00 .00 18240	Oct 1 Sep 19 Sep 19		62.2 549 .00 14300 .00 .00 .00 16300 33.75 .00 45090	Jul May Jul Jul Jul	1951 1991 28 1958 5 1926 10 1930 28 1958 22 1993 tt years
10 PERCENT EXCE 50 PERCENT EXCE 90 PERCENT EXCE	EEDS		25 2.5 .00				13 .04 .00			58 3.1 .00		



07141220 ARKANSAS RIVER NEAR LARNED, KS

LOCATION.--Lat $38^{\circ}12^{\circ}13^{\circ}$, long $99^{\circ}00^{\circ}05^{\circ}$, in SE $^{1}/_{4}$ SE $^{1}/_{4}$ SE $^{1}/_{4}$ sec.19, T.21 S., R.15 W., Pawnee County, Hydrologic Unit 11030004, on right bank at downstream side of county bridge, 1 mi north and 5.1 mi east of Larned, and at mile 904.5.

DRAINAGE AREA.-34,002 mi^2 , of which 5,871 mi^2 is probably noncontributing.

PERIOD OF RECORD. -- October 1998 to September 1999.

GAGE.--Water-stage recorder. Datum of gage is 1,943.33 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow moderately regulated since 1943 by John Martin Reservoir (station 07130000). Natural flow affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

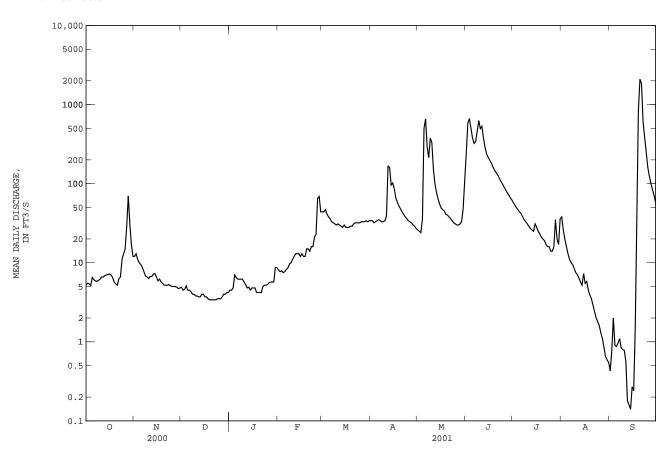
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 $\mathrm{ft^3/s}$ and maximum (*):

Date	Tim	e	Discharge (ft ³ /s)	Gag	e height (ft)		Date	Time		Discharge (ft ³ /s)	Gag	e height (ft)
May 5 May 9 Jun 3	230 210 010	0	1,180 590 740		8.58 6.91 7.39		Jun 9 Jun 11 Sep 20	0500 0200 2400)	760 608 *2,340	*	7.45 6.97 10.90
		DISCHA	ARGE, CUBIC	FEET PE		WATER YEA Y MEAN VAI		2000 TO	SEPTEMBI	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	5.2 5.5 5.4 5.2 6.5	12 13 11 10 9.5	4.9 4.5 4.6 5.1 4.5	e4.5 e4.5 e4.8 e7.0 e6.5	8.1 7.7 7.9 7.5 7.7	e44 e44 47 41 38	34 34 32 33 34	26 25 24 36 498	243 582 666 502 379	58 54 50 47 44	38 26 20 16 13	.43 .77 2.0 .90 .87
6 7 8 9 10	6.1 5.9 5.8 6.0 6.2	8.7 7.7 6.8 6.6 6.3	4.5 4.3 4.0 4.0 e3.8	e6.2 e6.2 e6.2 e6.2 5.7	8.2 8.6 9.6 10	36 33 32 31 30	35 34 33 33 34	659 294 214 375 332	323 341 461 628 497	42 38 35 33 31	11 10 9.5 8.4 7.5	.96 1.1 .84 .80
11 12 13 14 15	6.6 6.6 6.9 7.0 7.1	6.7 6.7 7.2 7.3 6.6	e3.8 3.7 e3.7 e4.0 e4.0	5.3 4.8 4.9 4.5 4.8	e12 13 13 13 12	31 30 29 28 30	39 166 161 96 102	153 99 77 64 55	532 377 288 238 215	29 27 26 25 31	7.1 6.4 5.7 5.2 7.3	.56 .18 .16 .14 .27
16 17 18 19 20	7.2 7.0 6.5 5.7	5.9 6.2 5.7 5.5 5.2	e3.7 e3.7 e3.5 e3.4 e3.4	4.8 4.8 e4.2 e4.2 e4.2	13 12 e12 15 15	28 28 28 29 29	86 66 58 52 48	49 47 45 41 40	199 182 164 149 139	28 25 23 21 20	5.5 5.8 4.5 3.9 3.5	.24 1.5 35 846 2100
21 22 23 24 25	5.2 6.3 6.6 11	5.2 5.2 5.3 5.1 5.0	e3.4 e3.4 e3.5 e3.5	e4.2 e5.0 e5.2 5.2 5.3	14 16 16 21 23	31 32 32 32 32 32	44 41 38 36 34	38 36 34 32 31	130 119 108 100 92	19 17 16 16 14	2.9 2.4 2.0 1.8 1.6	1840 599 388 250 162
26 27 28 29 30 31	15 29 70 31 17	5.0 5.0 4.9 4.7 4.8	e3.5 e3.7 e4.0 e4.0 e4.2 e4.2	5.6 5.7 e5.7 e5.7 e8.7 8.7	65 69 44 	33 33 33 34 33 34	33 32 30 29 27	30 30 31 33 48 109	85 78 73 67 63	14 16 35 20 17 36	1.3 1.1 .85 .65 .59	124 101 84 71 58
MEAN MAX MIN AC-FT	11.0 70 5.2 674	6.83 13 4.7 406	3.93 5.1 3.4 242	5.46 8.7 4.2 336	17.3 69 7.5 961	33.1 47 28 2030	51.8 166 27 3080	116 659 24 7150	267 666 63 15910	29.3 58 14 1800	7.42 38 .55 456	222 2100 .14 13230

07141220 ARKANSAS RIVER NEAR LARNED, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	72.8 154 2000 11.0 2001	102 175 1999 6.83 2001	87.4 140 2000 3.93 2001	80.0 134 2000 5.46 2001	104 150 1999 17.3 2001	181 347 2000 33.1 2001	221 307 1999 51.8 2001	433 911 1999 116 2001	666 1662 1999 69.7 2000	274 678 1999 29.3 2001	169 449 1999 7.42 2001	138 222 2001 8.62 2000
SUMMARY	STATIST	ICS	FOR 2	2000 CALEN	DAR YEAR	FC	OR 2001 WAT	ER YEAR		WATER YE	ARS 1999	- 2001
	MEAN 'ANNUAL I ANNUAL MI			122			63.9			211 413 63.9		1999 2001
	DAILY M			661	May 3		2100	Sep 20		2100	Sep (20 2001
LOWEST	DAILY MEA	AN		3.4	Dec 19		.14	Sep 14		.14	Sep	L4 2001
ANNUAL	SEVEN-DAY	Y MINIMUM		3.4	Dec 18		.33	Sep 10		.33		LO 2001
	I PEAK FLO						2340	Sep 20		2340		20 2001
	I PEAK STA						10.90	Sep 20		10.90		20 2001
	ANEOUS LO						.10	Sep 13		.10	Sep :	L3 2001
	RUNOFF (A	- ,		88870			46280			152700		
	ENT EXCE			303			134			484		
	ENT EXCE			70			14			122		
90 PERC	ENT EXCE	EDS		5.1			3.5			5.7		



07141300 ARKANSAS RIVER AT GREAT BEND, KS

LOCATION.--Lat $38^{\circ}21^{\circ}11^{\circ}$, long $98^{\circ}45^{\circ}50^{\circ}$, in SW $^{1}/_{4}$ NW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.33, T.19 S., R.13 W., Barton County, Hydrologic Unit 11030004, on left bank, top of levee, at downstream side of bridge on U.S. Highway 281, 0.5 mi south of Great Bend, 4.5 mi upstream from Walnut Creek, and at mile 873.2.

DRAINAGE AREA. --34,356 mi², of which 6,002 mi² is probably noncontributing.

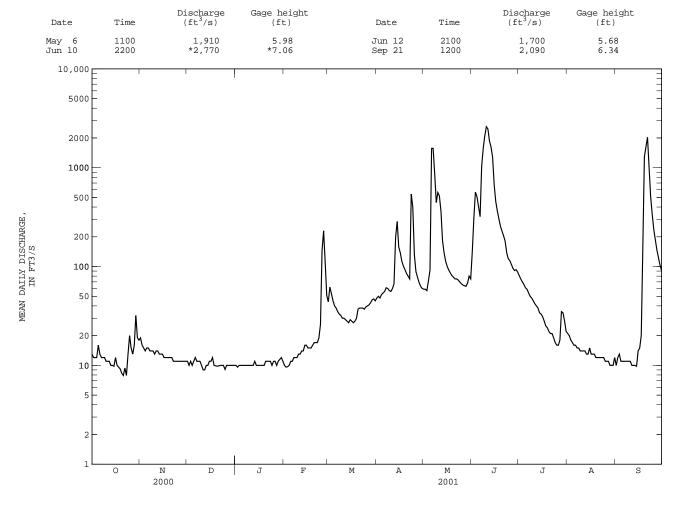
PERIOD OF RECORD.--September 1940 to current year. Fragmentary gage-height records collected at same site, at datum 3.0 ft higher, 1906, 1908-12, are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,835.19 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1975, at datum 4.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow moderately regulated since Oct. 1948 by John Martin Reservoir (station 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):



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07141300 ARKANSAS RIVER AT GREAT BEND, KS--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES

					DALLY	MEAN VA	LUES					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	13 12 12 12 12	19 16 15 14 15	11 10 11 10	10 9.6 10 10	10 9.6 9.7 10	44 62 53 45 40	48 50 48 52 54	59 59 57 72 92	140 305 565 511 405	81 75 70 66 61	21 20 18 17 16	10 12 13 11
6 7 8 9 10	13 12 12 12 12	15 14 14 14 13	12 11 11 11 10	10 10 10 10 10	11 12 e12 e12 e13	38 35 33 32 30	56 61 60 57 56	1570 1570 862 444 561	320 1030 1570 2100 2600	59 54 50 48 45	16 15 15 14 14	11 11 11 11
11 12 13 14 15	11 11 10 10 9.8	14 14 13 13	e9 e9 e10 e10	10 10 11 10	e13 14 14 16 16	30 29 28 27 29	60 67 195 286 158	519 362 182 137 113	2470 1860 1620 1270 673	42 40 38 34 33	14 14 13 13 15	10 10 10 9.8 14
16 17 18 19 20	12 10 9.6 9.2 8.3	12 12 12 12 12	11 12 10 9.9 9.8	10 10 10 10 11	e15 e15 15 16 17	28 27 28 30 37	138 113 101 93 85	100 92 86 81 78	457 366 305 256 228	31 28 25 24 22	13 13 13 12 12	15 20 157 1290 1630
21 22 23 24 25	7.9 9.4 7.9 13 20	12 11 11 11 11	9.9 e10 10 e10 9.1	11 11 11 10 11	17 17 19 26 145	38 38 38 37 39	80 75 542 399 132	75 75 73 70 67	205 181 138 120 115	21 21 19 17 16	12 12 12 12 11	2030 1010 510 338 238
26 27 28 29 30 31	15 13 16 32 19 18	11 11 11 11 11	e10 e10 e10 10 10	11 10 11 e11.5 12	230 110 51 	40 41 43 46 47 45	89 78 69 63 60	65 64 63 68 80 75	105 96 91 93 88	16 18 35 34 28 22	11 10 10 10 10	186 147 123 103 91
MEAN MAX MIN AC-FT	12.8 32 7.9 788	12.9 19 11 768	10.3 12 9.0 632	10.4 12 9.6 639	31.3 230 9.6 1740	37.3 62 27 2290	114 542 48 6790	254 1570 57 15610	676 2600 88 40230	37.8 81 16 2330	13.6 21 10 835	268 2030 9.8 15970
STATIS	TICS OF MO	ONTHLY ME	AN DATA F	OR WATER Y	YEARS 1941	- 2001,	BY WATER	YEAR (WY)				
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	175 1304 1974 .39 1985	166 1170 1997 .33 1981	131 589 1942 .80 1981	136 707 1943 .38 1981	174 843 1949 1.75 1981	225 1560 1973 1.11 1981	273 2646 1973 1.46 1981	392 6047 1942 1.09 1992	582 4089 1951 3.05 1991	469 4033 1951 1.72 1991	289 3247 1950 .13 1946	217 1347 1950 .38 1984
SUMMAR	Y STATISTI	ICS	FOR	2000 CALEN	NDAR YEAR	F	OR 2001 WA	TER YEAR		WATER YEA	ARS 1941	- 2001
LOWEST HIGHES LOWEST ANNUAL MAXIMU MAXIMU INSTAN ANNUAL 10 PER 50 PER	MEAN T ANNUAL ME T ANNUAL ME T DAILY ME DAILY ME SEVEN-DAY M PEAK FIL MI PEAK FIL TIANBOUS LO RUNOFF (A CENT EXCER CENT EXCER	EAN EAN AN MINIMUM OW AGE OW FLOW AC-FT) EDS	ı	1320 7.9 8.8 95940 290 93	May 3 Oct 21 Sep 24		2600 7.9 8.9 2770 7.06 2.5 88630 229 17	Jun 10 Oct 21 Oct 17 Jun 10 Jun 10 Jan 27		269 1565 2.46 21800 .00 .00 27800 17.70 .00 195200 540 84 4.3	Oct Aug Jun Jun	1942 1985 23 1965 25 1940 25 1946 23 1965 15 1981 tt times

e Estimated

07141750 WET WALNUT WATERSHED STRUCTURE NO. 39 NEAR BAZINE, KS

LOCATION.--Lat $38^{\circ}29^{\circ}48^{\circ}$, long $99^{\circ}47^{\circ}06^{\circ}$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ NE $^{1}/_{4}$ sec.08, T.18 S., R.22 W., Ness County, Hydrologic Unit 11030008, on upstream face of dam, 5.7 mi northwest of Bazine.

DRAINAGE AREA.--17 mi².

PERIOD OF RECORD.--November 1994 to current year

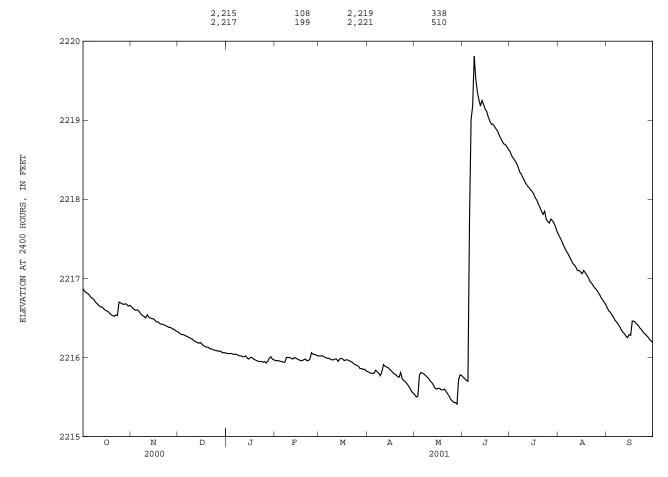
GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Natural Resources Conservation Service).

REMARKS.--Records good. Water elevation not recorded below 2,208.29 ft. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 2,221.58 ft Aug. 3, 1999, contents, 571 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 2,220.01 ft June 8, contents, 421 acre-ft; minimum elevation, 2,215.41 ft May 28, contents, 123 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-ft) (Based on field survey by Natural Resources Conservation Service)



07141750 WET WALNUT WATERSHED STRUCTURE NO. 39 NEAR BAZINE, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2216.87	2216.64	2216.32	2216.05	2215.96	2216.02	2215.82	2215.53	2215.75	2218.60	2217.55	2216.63
2	2216.84	2216.62	2216.30	2216.05	2215.96	2216.02	2215.81	2215.50	2215.73	2218.55	2217.51	2216.59
3	2216.82	2216.60	2216.29	2216.05	2215.96	2216.02	2215.80	2215.51	2215.71	2218.52	2217.47	2216.57
4	2216.81	2216.60	2216.29	2216.05	2215.95	2216.01	2215.80	2215.78	2215.70	2218.49	2217.42	2216.54
5	2216.79	2216.60	2216.28	2216.04	2215.95	2216.00	2215.80	2215.81	2217.75	2218.46	2217.38	2216.51
6	2216.76	2216.58	2216.27	2216.04	2215.94	2215.99	2215.84	2215.80	2219.01	2218.41	2217.34	2216.47
7	2216.75	2216.55	2216.26	2216.04	2215.94	2215.99	2215.82	2215.79	2219.18	2218.35	2217.31	2216.45
8	2216.73	2216.53	2216.25	2216.03	2216.00	2215.98	2215.80	2215.77	2219.81	2218.32	2217.27	2216.42
9	2216.70	2216.52	2216.24	2216.02	2216.00	2215.97	2215.77	2215.75	2219.52	2218.28	2217.23	2216.39
10	2216.68	2216.50	2216.23	2216.02	2216.00	2215.97	2215.82	2215.73	2219.36	2218.24	2217.19	2216.35
11	2216.66	2216.54	2216.21	2216.01	2215.99	2215.98	2215.91	2215.70	2219.26	2218.20	2217.17	2216.32
12	2216.64	2216.51	2216.20	2216.01	2215.98	2215.98	2215.89	2215.68	2219.18	2218.17	2217.14	2216.30
13	2216.64	2216.50	2216.19	2216.02	2216.00	2215.95	2215.88	2215.65	2219.25	2218.15	2217.10	2216.27
14	2216.62	2216.49	2216.18	2215.99	2215.99	2215.98	2215.87	2215.61	2219.20	2218.12	2217.10	2216.25
15	2216.60	2216.49	2216.19	2215.98	2215.98	2215.99	2215.85	2215.60	2219.14	2218.10	2217.08	2216.29
16	2216.59	2216.47	2216.17	2216.00	2215.97	2215.98	2215.83	2215.61	2219.11	2218.07	2217.06	2216.28
17	2216.58	2216.45	2216.15	2216.00	2215.96	2215.96	2215.81	2215.61	2219.04	2218.02	2217.10	2216.46
18	2216.56	2216.45	2216.14	2215.98	2215.96	2215.97	2215.79	2215.59	2218.99	2217.99	2217.07	2216.46
19	2216.54	2216.43	2216.13	2215.97	2215.97	2215.97	2215.78	2215.59	2218.95	2217.94	2217.04	2216.44
20	2216.53	2216.42	2216.13	2215.96	2215.98	2215.96	2215.76	2215.60	2218.95	2217.90	2217.01	2216.42
21	2216.52	2216.42	2216.11	2215.95	2215.96	2215.95	2215.75	2215.57	2218.92	2217.85	2216.96	2216.40
22	2216.54	2216.41	2216.11	2215.95	2215.96	2215.94	2215.81	2215.54	2218.89	2217.81	2216.94	2216.37
23	2216.53	2216.40	2216.10	2215.95	2215.98	2215.92	2215.73	2215.51	2218.86	2217.85	2216.91	2216.35
24	2216.70	2216.39	2216.09	2215.94	2216.06	2215.91	2215.71	2215.47	2218.81	2217.75	2216.88	2216.32
25	2216.69	2216.38	2216.09	2215.95	2216.04	2215.90	2215.69	2215.45	2218.77	2217.72	2216.86	2216.30
26 27 28 29 30 31	2216.68 2216.67 2216.68 2216.67 2216.65 2216.66	2216.38 2216.36 2216.36 2216.34 2216.33	2216.08 2216.08 2216.08 2216.06 2216.06 2216.06	2215.93 2215.95 2215.99 2216.01 2215.98 2215.97	2216.04 2216.03 2216.02 	2215.89 2215.86 2215.86 2215.85 2215.85 2215.83	2215.67 2215.64 2215.61 2215.57 2215.55	2215.43 2215.43 2215.41 2215.72 2215.78 2215.77	2218.73 2218.70 2218.69 2218.66 2218.63	2217.70 2217.75 2217.73 2217.70 2217.65 2217.59	2216.83 2216.80 2216.76 2216.73 2216.70 2216.67	2216.28 2216.26 2216.23 2216.21 2216.19
MEAN	2216.67	2216.48	2216.17	2216.00	2215.98	2215.95	2215.77	2215.62	2218.54	2218.06	2217.08	2216.38
MAX	2216.87	2216.64	2216.32	2216.05	2216.06	2216.02	2215.91	2215.81	2219.81	2218.60	2217.55	2216.63
MIN	2216.52	2216.33	2216.06	2215.93	2215.94	2215.83	2215.55	2215.41	2215.70	2217.59	2216.67	2216.19
(+)	181	164	152	148	151	142	129	139	312	235	181	158
(#)	-12	-17	-12	-4	+3	-9	-13	+10	+173	-77	-54	-23

CAL YR 2000 (#) -39 WTR YR 2001 (#) -35

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

07141770 WALNUT CREEK NEAR ALEXANDER, KS

LOCATION.--Lat $38^{\circ}27^{\circ}53^{\circ}$, long $99^{\circ}37^{\circ}20^{\circ}$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.26, T.18 S., R.21 W., Ness County, Hydrologic Unit 11030008, at right bank of downstream side of bridge, 3.6 mi west of Alexander, and at mile 105.0.

DRAINAGE AREA.--1,025 \min^2 .

PERIOD OF RECORD. -- November 1994 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,068.19 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ${\rm ft}^3/{\rm s}$ and maximum (*):

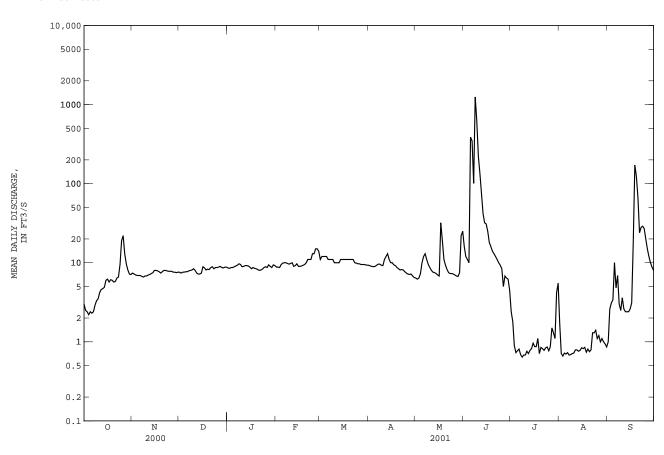
Date	Time	e	Discharge (ft ³ /s)	Gag	e height (ft)		Date	Tin	ne	Discharge (ft ³ /s)		height
Jun 5	181	5	843		12.65		Jun 8	150	00	*1,810	*2	0.39
		DISCHA	ARGE, CUBIC	FEET PE		WATER YI Y MEAN V	EAR OCTOBER ALUES	2000 TO) SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	3.0 2.5 2.4 2.2 2.4	7.4 7.2 7.0 6.9 6.9	7.6 7.4 7.6 7.6 7.7	e8.6 8.5 8.7 8.7 8.9	e8.8 e8.8 8.7 9.5 9.9	11 12 12 12 12	9.3 9.1 9.0 8.9 9.0	6.4 6.2 6.4 7.3	16 12 11 10 388	2.4 1.8 .89 .73	1.7 .71 .66 .72	1.0 2.6 3.1 3.4
6 7 8 9 10	2.3 2.4 2.9 3.3 3.5	6.9 6.7 6.6 6.8 6.8	7.7 7.9 8.0 8.1 8.4	9.1 9.3 9.7 9.5 8.9	10 10 e9.8 e9.6 e9.8	11 11 11 11 10	9.3 9.6 9.6 9.3	12 13 11 9.5 8.7	347 101 1250 620 224	.81 .69 .64 .68	.73 .68 .69 .71 .72	4.8 6.9 3.0 2.5 3.6
11 12 13 14 15	4.2 4.6 4.7 4.9 6.0	7.0 7.1 7.3 7.5 8.0	e8.0 e7.4 e7.2 e7.2 7.4	9.0 9.2 9.2 9.1 8.8	10 9.0 9.2 9.7 e9.0	10 10 10 11	11 12 13 11 10	8.0 7.6 7.5 7.3 7.0	135 75 42 32 31	.76 .71 .78 .82 .96	.79 .79 .76 .78	2.6 2.4 2.4 2.4 2.6
16 17 18 19 20	6.2 5.7 6.1 6.0 5.7	8.0 7.9 7.7 7.4 7.7	8.9 8.6 8.1 8.3 8.2	8.4 8.7 e8.5 8.4 e8.2	e9.0 e9.1 9.3 9.5	11 11 11 11 11	10 9.4 9.2 8.7 8.4	6.8 32 19 11 9.3	25 18 16 14 13	.87 .87 1.1 .71 .85	.82 .85 .74 .81 .75	3.1 18 172 124 66
21 22 23 24 25	5.8 6.4 6.6 9.5	8.0 8.0 7.9 7.8 7.8	8.7 8.9 8.4 8.7	8.0 8.1 8.3 8.7 8.9	11 11 11 13 13	11 11 10 9.9 9.7	8.1 8.2 8.1 7.7 7.4	8.2 7.5 7.3 7.3 7.2	12 11 10 9.3 8.4	.82 .78 .84 .86	.79 1.3 1.3 1.4	24 28 29 27 20
26 27 28 29 30 31	22 13 9.7 8.1 7.2 7.1	7.8 7.6 7.6 7.5 7.6	8.8 9.0 8.7 8.6 8.8	8.7 9.4 e9.0 8.7 9.4 e9.2	15 15 14 	9.7 9.5 9.5 9.5 9.4 9.3	7.2 7.1 7.2 6.8 6.5	7.0 6.8 6.7 7.5 22 25	5.0 6.8 6.4 6.2 4.5	.87 1.5 1.3 1.1 4.2 5.5	1.2 1.0 1.1 1.0 .94	15 12 10 8.8 8.0
MEAN MAX MIN AC-FT	6.30 22 2.2 388	7.41 8.0 6.6 441	8.17 9.0 7.2 503	8.83 9.7 8.0 543	10.4 15 8.7 579	10.6 12 9.3 652	8.98 13 6.5 534	10.3 32 6.2 632	115 1250 4.5 6860	1.20 5.5 .64 74	.90 1.7 .66 55	20.6 172 1.0 1230

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07141770 WALNUT CREEK NEAR ALEXANDER, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	9.69 22.6 1997 3.50 1996	19.6 67.5 1997 5.44 1996	10.4 18.4 1997 6.28 1996	10.2 13.7 1997 8.06 1996	11.6 16.5 1998 7.90 1996	20.7 50.2 2000 7.75 1996	16.1 26.7 1998 5.55 1996	20.0 49.1 1996 9.07 1997	51.4 148 1996 5.92 1998	41.1 87.3 1999 1.20 2001	55.7 116 1999 .90 2001	25.5 100 1996 2.73 2000
SUMMARY	STATISTI	CS	FOR 2	2000 CALENI	DAR YEAR	FC	OR 2001 WAT	ER YE	AR	WATER YEA	ARS 1996	- 2001
LOWEST	MEAN ANNUAL M ANNUAL ME DAILY ME	AN		19.3 527	Jul 5		17.2 1250	Jun	8	24.4 37.7 17.2 1550	Jun	1996 2001 1 1996
LOWEST ANNUAL	DAILY MEA SEVEN-DAY	N MINIMUM		1.2 1.6	Aug 18 Aug 12		.64 .70	Jul Aug	8	.52 .70	Jul Aug	17 1997 2 2001
MAXIMUM	PEAK FLO PEAK STA ANEOUS LO	.GE					1810 20.39 .51	Jun Jun Aug	8 8 3	3070 21.19 .51	Jun Jun Aug	1 1996 1 1996 3 2001
10 PERC 50 PERC	RUNOFF (A ENT EXCEE ENT EXCEE	DS DS		14030 32 9.2			12490 13 8.1			17670 30 10		
90 PERC	ENT EXCEE	DS		2.6			.85			4.1		



07141778 WET WALNUT WATERSHED STRUCTURE NO. 17 NEAR NEKOMA, KS

LOCATION.--Lat $38^{\circ}24^{\circ}58^{\circ}$, long $99^{\circ}28^{\circ}40^{\circ}$, in NE $^{1}/_{4}$ SE $^{1}/_{4}$ SW $^{1}/_{4}$ sec.12, T.19 S., R.20 W., Rush County, Hydrologic Unit 11030008, on upstream face of dam, 4.8 mi southwest of Nekoma.

DRAINAGE AREA.--9.1 mi².

PERIOD OF RECORD. -- November 1994 to current year.

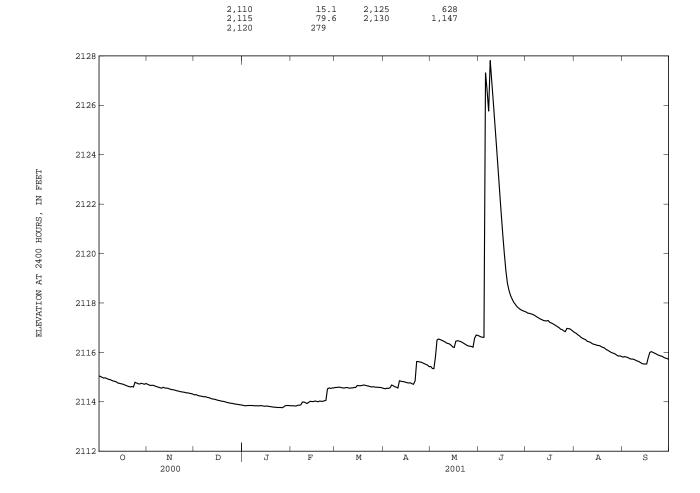
GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Natural Resources Conservation Service).

REMARKS.--Records good. Water elevation not recorded below 2,110.20 ft. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 2,126.24 ft Nov. 11, 1997, contents, 740 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation 2,127.94 ft June 8, contents, 916 acre-ft, minimum elevation, 2,113.74 ft Jan. 25, contents, 53.6 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-ft) (Based on field survey by Natural Resources Conservation Service)



07141778 WET WALNUT WATERSHED STRUCTURE NO. 17 NEAR NEKOMA, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2115.05	2114.71	2114.28	2113.86	2113.84	2114.58	2114.54	2115.43	2116.66	2117.63	2116.80	2115.81
2	2115.02	2114.68	2114.29	2113.84	2113.84	2114.58	2114.53	2115.35	2116.63	2117.59	2116.77	2115.83
3	2114.99	2114.66	2114.26	2113.84	2113.83	2114.59	2114.55	2115.34	2116.61	2117.58	2116.71	2115.81
4	2114.96	2114.67	2114.24	2113.85	2113.83	2114.59	2114.54	2115.82	2116.61	2117.56	2116.67	2115.79
5	2114.97	2114.66	2114.23	2113.85	2113.86	2114.57	2114.57	2116.50	2127.32	2117.54	2116.61	2115.75
6	2114.94	2114.63	2114.22	2113.85	2113.86	2114.56	2114.68	2116.54	2126.60	2117.51	2116.57	2115.73
7	2114.91	2114.61	2114.20	2113.85	2113.88	2114.56	2114.65	2116.52	2125.76	2117.47	2116.54	2115.73
8	2114.90	2114.59	2114.21	2113.84	2113.99	2114.58	2114.61	2116.49	2127.82	2117.43	2116.51	2115.71
9	2114.87	2114.57	2114.18	2113.84	2113.99	2114.57	2114.59	2116.46	2126.95	2117.39	2116.45	2115.68
10	2114.84	2114.55	2114.17	2113.84	2113.96	2114.55	2114.56	2116.43	2126.11	2117.35	2116.43	2115.65
11	2114.83	2114.59	2114.15	2113.83	2113.93	2114.56	2114.85	2116.38	2125.23	2117.33	2116.41	2115.63
12	2114.81	2114.56	2114.12	2113.85	2113.98	2114.56	2114.83	2116.36	2124.35	2117.29	2116.36	2115.59
13	2114.76	2114.55	2114.11	2113.84	2114.02	2114.58	2114.82	2116.34	2123.45	2117.28	2116.33	2115.55
14	2114.75	2114.55	2114.10	2113.83	2114.01	2114.58	2114.81	2116.29	2122.53	2117.27	2116.32	2115.53
15	2114.73	2114.52	2114.08	2113.82	2114.01	2114.66	2114.79	2116.22	2121.64	2117.29	2116.29	2115.53
16	2114.72	2114.50	2114.06	2113.83	2114.03	2114.65	2114.77	2116.20	2120.79	2117.22	2116.28	2115.53
17	2114.69	2114.49	2114.05	2113.82	2114.02	2114.65	2114.76	2116.45	2120.01	2117.19	2116.27	2115.79
18	2114.67	2114.48	2114.03	2113.81	2114.00	2114.66	2114.77	2116.47	2119.31	2117.16	2116.23	2116.00
19	2114.64	2114.46	2114.02	2113.80	2114.03	2114.68	2114.73	2116.46	2118.80	2117.12	2116.20	2116.03
20	2114.62	2114.44	2114.01	2113.79	2114.02	2114.67	2114.71	2116.44	2118.51	2117.08	2116.18	2116.00
21	2114.60	2114.43	2113.99	2113.78	2114.02	2114.65	2114.85	2116.41	2118.30	2117.04	2116.12	2115.97
22	2114.62	2114.41	2113.97	2113.78	2114.04	2114.64	2115.63	2116.37	2118.16	2117.00	2116.09	2115.94
23	2114.60	2114.40	2113.96	2113.77	2114.06	2114.62	2115.63	2116.33	2118.03	2116.94	2116.05	2115.90
24	2114.79	2114.39	2113.94	2113.77	2114.52	2114.60	2115.61	2116.29	2117.95	2116.92	2116.01	2115.88
25	2114.76	2114.38	2113.94	2113.77	2114.56	2114.61	2115.60	2116.26	2117.86	2116.87	2115.98	2115.85
26 27 28 29 30 31	2114.73 2114.72 2114.75 2114.73 2114.71 2114.74	2114.36 2114.36 2114.34 2114.33 2114.31	2113.92 2113.91 2113.90 2113.89 2113.88 2113.87	2113.85 2113.85		2114.60 2114.59 2114.59 2114.58 2114.58 2114.56	2115.57 2115.54 2115.51 2115.48 2115.42	2116.25 2116.24 2116.21 2116.57 2116.70 2116.69	2117.80 2117.75 2117.71 2117.68 2117.66	2116.84 2116.97 2116.96 2116.95 2116.90 2116.85	2115.96 2115.93 2115.88 2115.85 2115.86 2115.83	2115.84 2115.79 2115.77 2115.75 2115.72
MEAN MAX MIN (+) (#)	2114.79 2115.05 2114.60 73.4 -8.5	2114.51 2114.71 2114.31 64.1 -9.3		2113.82 2113.86 2113.76 55.3 5	2114.06 2114.56 2113.83 69.3 +14	2114.60 2114.68 2114.55 69.3	2114.95 2115.63 2114.53 90.8 +21.5	2116.28 2116.70 2115.34 130 +39.2	2120.69 2127.82 2116.61 166 +36	2117.21 2117.63 2116.84 135 -31	2116.27 2116.80 2115.83 103 -32	2115.77 2116.03 2115.53 99.8 -3.2

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

07141780 WALNUT CREEK AT NEKOMA, KS

LOCATION.--Lat $38^{\circ}28^{\circ}37^{\circ}$, long $99^{\circ}26^{\circ}13^{\circ}$, in SW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.21, T.18 S., R.19 W., Rush County, Hydrologic Unit 11030008, on right bank at downstream side of bridge 1,000 ft north of State Highway 96, 7.0 mi west of Rush Center.

DRAINAGE AREA.--1,256 mi^2 , of which 104 mi^2 is probably noncontributing.

PERIOD OF RECORD.--October 1969 to current year. Published as "near Rush Center" October 1969 to September 1995.

GAGE.--Water-stage recorder. Elevation of gage is 2,030 ft above sea level, from topographic map.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

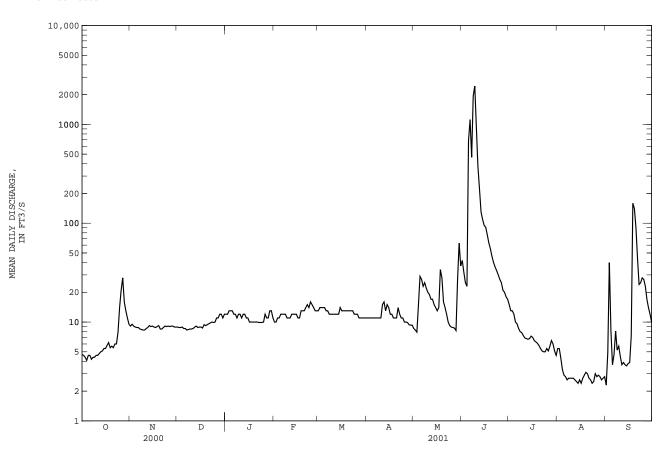
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ${\rm ft^3/s}$ and maximum (*):

Date	Tim	ne	Discharge (ft ³ /s)	e Gag	e height (ft)		Date	Time	e	Discharge (ft ³ /s)		height (ft)
Jun 6	130	00	1,200	:	20.43		Jun 9	0430)	*2,760	*2	7.59
		DISCHA	ARGE, CUBIO	C FEET PE	R SECOND, DAILY	WATER YEA		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	4.7 4.6 4.4 4.1 4.6	9.1 9.5 9.1 8.9 8.8	8.9 8.8 8.8 e8.9 e8.6	12 12 13 13	e10 10 e11 11 e12	e13 14 14 14 14	11 11 11 11 11	8.6 8.3 7.9 15 29	42 32 25 23 685	15 13 13 12 10	5.4 5.4 4.3 3.3 2.9	2.3 4.9 40 8.2 3.7
6 7 8 9 10	4.6 4.2 4.4 4.4	8.8 8.5 8.4 8.3 8.3	8.6 8.3 8.4 8.5 8.5	12 12 11 12 12	12 12 12 e11 e11	13 13 12 12 12	11 11 11 11 11	27 23 25 22 20	1120 465 1940 2440 942	9.6 8.6 8.0 7.8 7.3	2.8 2.6 2.7 2.7 2.7	4.7 8.1 5.2 5.7 4.5
11 12 13 14 15	4.6 4.8 5.0 5.1 5.4	8.6 8.8 9.2 e9.0 9.1	e8.6 8.9 9.1 8.8 8.9	11 12 12 e11 e11	e11 12 12 12 12	12 12 12 12 12	15 16 13 15 14	19 17 17 15 14	378 223 130 109 95	6.9 6.8 6.7 6.8 7.2	2.7 2.6 2.5 2.4 2.6	3.7 3.9 3.7 3.6 3.8
16 17 18 19 20	5.4 5.8 6.2 5.5 5.7	8.9 e8.8 e9.0 9.2 8.5	8.9 8.7 9.4 9.2 9.4	e10 e10 e10 10 e10	e11 11 13 13	13 13 13 13	12 12 11 11	13 14 34 28 16	91 76 63 55 46	7.0 6.5 6.3 6.1 5.8	2.4 2.7 2.9 3.1 3.0	3.9 7.3 159 141 90
21 22 23 24 25	5.5 6.0 6.0 7.9	e8.5 8.8 9.1 9.0 9.1	9.6 9.8 10 9.9	10 9.9 9.9 9.9	e14 15 14 16 e15	13 13 13 12 12	14 12 11 11	14 12 10 9.2 8.9	40 36 33 30 27	5.4 5.1 5.0 5.0	2.7 2.6 2.4 2.5 3.0	44 24 25 28 27
26 27 28 29 30 31	21 28 16 13 11 9.5	9.0 9.1 9.1 8.9 8.9	11 11 12 12 11 11	12 e11 11 13 13	e14 e13 e13 	12 11 11 11 11 11	10 9.9 9.4 9.3 9.3	8.8 8.7 8.2 27 63 37	25 21 20 18 17	5.1 5.7 6.5 6.0 5.1 4.6	2.8 2.9 2.8 2.6 2.7 2.8	23 17 14 12 10
MEAN MAX MIN AC-FT	7.61 28 4.1 468	8.88 9.5 8.3 528	9.50 12 8.3 584	11.3 13 9.9 694	12.4 16 10 686	12.5 14 11 770	11.5 16 9.3 686	18.7 63 7.9 1150	308 2440 17 18340	7.40 15 4.6 455	2.95 5.4 2.4 181	24.4 159 2.3 1450

07141780 WALNUT CREEK AT NEKOMA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	6.83 60.4 1974 .000 1971	9.03 125 1997 .000 1971	5.29 29.5 1974 .000 1971	6.35 61.1 1974 .000 1971	9.74 88.0 1993 .000 1978	37.3 349 1973 .000 1978	40.3 553 1987 .000 1972	18.8 96.2 1973 .000 1983	48.8 308 2001 .000 1977	73.1 969 1993 .000 1977	28.3 164 1999 .000 1970	17.4 150 1972 .000 1970
SUMMARY	Y STATIST	ICS	FOR 2	2000 CALEN	DAR YEAR	FC	OR 2001 WAT	TER YEAR		WATER YEA	RS 1970	- 2001
	MEAN I ANNUAL I ANNUAL MI			22.7			35.9			25.2 129 .000)	1993 1983
HIGHEST	C DAILY M	EAN		551	Jul 22		2440	Jun 9		5690		22 1993
	DAILY ME			2.1	Aug 20		2.3	Sep 1		.00		21 1970
		Y MINIMUM		2.4	Aug 18		2.6	Aug 10		.00		24 1970
	M PEAK FLO						2760	Jun 9		5790		21 1993
	M PEAK ST						27.59	Jun 9		34.00		21 1993
	FANEOUS LO			16510			2.1	Sep 1		.00	man	y years
	RUNOFF (- ,		16510			25990			18240		
	CENT EXCE			37			27			30		
	CENT EXCE			14			11			1.4		
90 PERC	CENT EXCE	EDS		3.6			4.0			.00		



07141890 WET WALNUT WATERSHED STRUCTURE NO. 2 NEAR OTIS, KS

LOCATION.--Lat $38^{\circ}30^{\circ}40^{\circ}$, long $99^{\circ}04^{\circ}25^{\circ}$, in SE $^{1}/_{4}$ SE $^{1}/_{4}$ NW $^{1}/_{4}$ sec.03, T.18 S., R.16 W., Rush County, Hydrologic Unit 11030008, on upstream face of dam, 1.5 mi south and 1 mi west of Otis.

DRAINAGE AREA.-5.9 mi^2 .

PERIOD OF RECORD. -- November 1994 to current year.

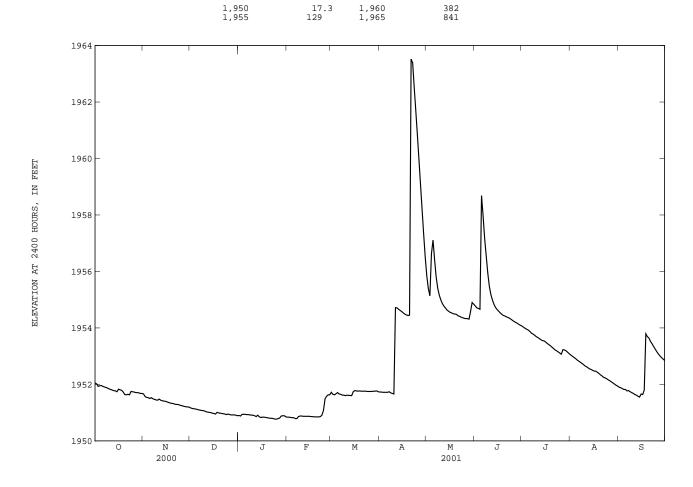
GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Natural Resources Conservation Service).

REMARKS.--Records fair. Water elevations are not recorded below 1949.91 ft. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD. --Maximum elevation 1,962.11 ft Nov. 16, 1997, contents, 543 acre-ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,964.17 ft Apr. 22, contents, 748 acre-ft; minimum elevation, 1,950.77 ft, Jan. 24, contents, 26.0 acre-ft.

Capacity table (elevation, in feet, and contents, in acre-ft) (Based on field survey by Natural Resources Conservation Service)



arkansas river basin 341

07141890 WET WALNUT WATERSHED STRUCTURE NO. 2 NEAR OTIS, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1951.93 1951.95	1951.66 1951.57 1951.54 1951.53 1951.50	1951.14	1950.94	1950.83 1950.82	1951.72 1951.65 1951.63 1951.67 1951.71		1955.85 1955.40 1955.14 1956.63 1957.11		1954.06 1954.02 1953.98 1953.95 1953.92	1953.04 1953.00 1952.96 1952.92 1952.87	1951.90 1951.88 1951.85 1951.82 1951.82
6 7 8 9 10	1951.89 1951.87		1951.10 1951.09 1951.08 1951.07 1951.06	1950.93 1950.93 1950.92 1950.91 1950.91	1950.79 1950.79 1950.86 1950.88 1950.88	1951.66 1951.65 1951.62 1951.62 1951.60	1951.72 1951.74 1951.70 1951.68 1951.66	1956.42 1955.81 1955.41 1955.16 1954.99	1957.97 1957.17 1956.55 1955.94 1955.47	1953.87 1953.81 1953.78 1953.74 1953.69		1951.77 1951.78 1951.74 1951.71 1951.68
11 12 13 14 15	1951.77	1951.48 1951.44 1951.42 1951.41 1951.40		1950.89 1950.86 1950.91 1950.85 1950.83	1950.87 1950.87 1950.87 1950.87 1950.87		1954.72 1954.71 1954.66 1954.62 1954.58	1954.86 1954.77 1954.70 1954.63 1954.59	1955.18 1954.98 1954.83 1954.72 1954.65	1953.66 1953.62 1953.58 1953.55 1953.54	1952.63 1952.59 1952.55 1952.53 1952.50	
16 17 18 19 20	1951.81 1951.79 1951.73	1951.38 1951.36 1951.34 1951.33 1951.32	1950.97 1950.95 1951.01 1950.99 1950.98	1950.84 1950.84 1950.83 1950.82 1950.81	1950.86 1950.86 1950.85 1950.85 1950.85	1951.78 1951.77 1951.76 1951.77 1951.76	1954.53 1954.49 1954.46 1954.44 1954.45	1954.55 1954.53 1954.50 1954.49 1954.48	1954.59 1954.53 1954.48 1954.44 1954.42	1953.50 1953.45 1953.41 1953.37 1953.32		1951.64 1951.80 1953.79 1953.69 1953.64
21 22 23 24 25	1951.63 1951.75	1951.30 1951.29 1951.29 1951.27 1951.25	1950.97 1950.96 1950.95 1950.93 1950.95	1950.80 1950.80 1950.79 1950.77	1950.85 1950.86 1950.91 1951.08 1951.49	1951.76 1951.76 1951.76 1951.75 1951.75	1963.52 1963.38 1962.50 1961.69 1960.84	1954.43 1954.41 1954.38 1954.36 1954.34	1954.39 1954.37 1954.34 1954.30 1954.26	1953.27 1953.22 1953.19 1953.15 1953.11	1952.30 1952.25 1952.23 1952.20 1952.16	1953.52 1953.44 1953.34 1953.25 1953.16
26 27 28 29 30 31	1951.71 1951.71 1951.70	1951.22 1951.21 1951.20	1950.92 1950.91	1950.88 1950.89	1951.63	1951.75 1951.75 1951.76 1951.76 1951.77 1951.74	1959.97 1959.09 1958.21 1957.34 1956.53	1954.33 1954.33 1954.31 1954.59 1954.90 1954.84	1954.22 1954.19 1954.16 1954.12 1954.09	1953.22 1953.19	1952.13 1952.09 1952.05 1952.01 1951.97 1951.94	1952.95 1952.90
MEAN MAX MIN (+) (#)	1952.05	1951.66	1951.01 1951.17 1950.89 27.7 5.0		1950.96 1951.63 1950.79 41.0 +13.9	1951.71 1951.78 1951.60 43.5 +2.5	1955.53 1963.52 1951.66 187 +143.5	1954.94 1957.11 1954.31 123 -64	1955.00 1958.68 1954.09 99.9 -23.1	1953.51 1954.06 1953.07 72.3 -27.6	1952.48 1953.04 1951.94 48.3 -24	1952.40 1953.79 1951.55 66.9 +18.6

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

Discharge

07141900 WALNUT CREEK AT ALBERT, KS

LOCATION.--Lat $38^{\circ}27^{\circ}40^{\circ}$, long $99^{\circ}00^{\circ}50^{\circ}$, in SW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.29, T.18 S., R.15 W., Barton County, Hydrologic Unit 11030008, on left bank at downstream side of county highway bridge, 0.2 mi north of Albert, 14 mi northwest of Great Bend, and at mile 43.0.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--1,410 mi^2 , approximately, of which 104 mi^2 is probably noncontributing.

PERIOD OF RECORD. -- May 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,897.37 ft above sea level (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1927 reached a stage of 21.3 ft, from floodmark and information by local residents (discharge not determined, but due to levees built in 1934 is substantially greater than indicated by current rating).

Discharge

Gage height

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

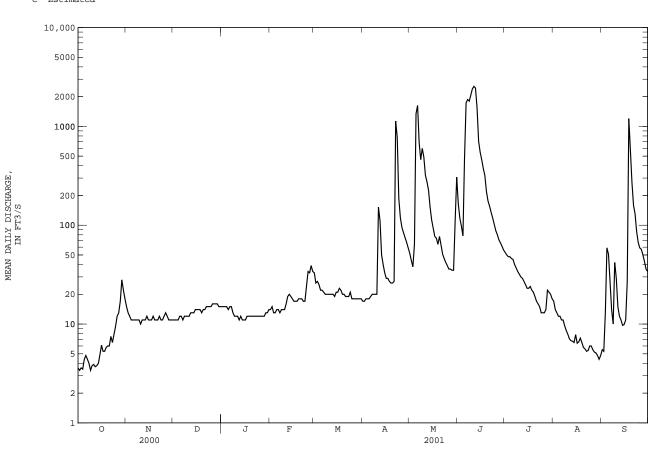
Gage height

Date	Tim	e	(ft ³ /s)	Gage	(ft)		Date	Time	9	(ft ³ /s)		(ft)
Apr 22 May 6	193 001		1,570 2,000		18.56 20.19		Jun 11 Sep 18	221 190		*2,620 1,470		23.20 17.04
		DISCHA	RGE, CUBIC	FEET PER		WATER YEAN VA		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	3.6 3.4 3.6 3.5 4.4	15 13 12 11 11	11 11 11 11 12	15 15 e15 15 14	e14 15 13 13	33 26 27 25 22	17 17 18 18	52 44 38 64 1340	166 118 98 78 476	53 50 48 48 46	17 14 13 12 12	5.5 5.3 13 59 51
6 7 8 9 10	4.8 4.4 4.0 3.4 3.8	11 11 11 11 10	12 11 12 12 12	15 15 13 12 12	14 13 14 e14 e14	22 21 20 20 20	19 20 20 20 20	1630 689 461 598 489	1730 1870 1800 2070 2390	45 40 37 34 32	11 11 9.6 8.6 7.9	27 14 10 42 29
11 12 13 14 15	3.9 3.7 3.8 4.0 4.9	11 11 11 12 11	e12 13 13 13 14	12 11 12 11 e11	e16 e19 20 19 18	20 20 20 19 21	152 111 50 40 33	321 275 226 152 113	2540 2440 1550 708 547	30 29 27 25 23	7.1 6.8 6.7 6.5 7.8	15 12 11 9.7 9.9
16 17 18 19 20	6.1 5.3 5.3 5.8 6.0	11 11 12 11	14 14 14 13 14	e11 12 e12 12 12	17 17 17 18 18	21 23 22 20 20	29 29 27 26 26	93 77 74 64 77	459 375 318 220 176	23 24 22 21 19	6.4 6.6 7.2 6.5 5.8	11 27 1200 576 270
21 22 23 24 25	6.0 7.5 6.5 7.9 9.5	11 12 11 11 12	14 15 15 15 15	12 12 12 12 12	18 17 17 24 34	19 19 19 21 18	27 1130 774 187 119	63 51 46 42 39	156 135 118 102 88	17 16 15 13	5.6 5.3 5.4 6.0 6.0	159 130 86 67 59
26 27 28 29 30 31	12 13 17 28 22 18	13 12 11 11 11	16 16 16 16 15	12 e12 e12 e13 e13	33 39 e34 	18 18 18 18 18	95 84 75 67 59	36 36 35 35 109 306	80 71 66 61 56	13 14 22 21 20 18	5.5 5.2 5.1 4.8 4.4 4.8	57 50 43 36 34
MEAN MAX MIN AC-FT	7.58 28 3.4 466	11.4 15 10 680	13.5 16 11 827	12.7 15 11 780	19.0 39 13 1060	20.8 33 18 1280	111 1130 17 6600	248 1630 35 15220	702 2540 56 41780	27.7 53 13 1700	7.79 17 4.4 479	104 1200 5.3 6190

07141900 WALNUT CREEK AT ALBERT, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG SEP	
MEAN 32.0 22.0 MAX 492 352 (WY) 1960 1997 MIN .000 .000 (WY) 1965 1967	10.5 11.0 89.7 116 1974 1974 .000 .000 1967 1978	18.5 271 1993 .000 1981	59.7 576 1960 .000 1967	58.1 779 1987 .000 1981	45.6 248 2001 .000 1966	102 1015 1967 .000 1985	101 1038 1993 .000 1980	60.6 80.7 508 1370 1961 1959 .000 .000 1983 1964	
SUMMARY STATISTICS	FOR 2000 CALEN	FOR 2001 WATER YEAR				WATER YEARS 1959 - 2001			
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN	41.2			106			50.2 189 .085	1993 1983	
HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM	663 1.9 2.4	Jul 23 Sep 23 Sep 20		2540 3.4 3.8	Jun 11 Oct 2 Oct 8		10300 .00 .00	Sep 23 1959 Jul 29 1961 Jul 5 1963	
MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW	2.4	Sep 20		2620 23.20 3.0	Jun 11 Jun 11 Oct 9		12700 25.75 .00	Sep 22 1959 Sep 22 1959 most years	
ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS	29880 73 24 4.0			77060 152 17 6.5	000 3		36390 63 2.8	mose rears	



07141900 WALNUT CREEK AT ALBERT, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. -- Water years 1962 to June 1985, 2000 to current year.

 ${\tt REMARKS.--Unpublished \ records \ of \ intermittent \ sediment \ samples \ are \ available \ on \ the \ World \ Wide \ Web \ at \ http://ks.water.usgs.gov/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linea$ nwis. Sediment samples are collected only at selected flow conditions.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
MAY 07	1005	657	469	18.0	733	1300
JUN	1005	657	409	10.0	133	1300
06	1030	1860		19.0	713	3580
06	1350	1860		19.0	658	3300
11	1250	2540	280	25.5	222	1520
21	1345	177	940	25.0	319	152
27	1420	74	1210	23.5	172	35
JUL						
31	1330	18	1520	26.0	221	11

07142020 WALNUT CREEK BELOW CHEYENNE BOTTOMS DIVERSION NEAR GREAT BEND, KS

LOCATION.--Lat $38^{\circ}25^{\circ}08^{\circ}$, long $98^{\circ}45^{\circ}53^{\circ}$, in SW $^{1}/_{4}$ NW $^{1}/_{4}$ NE $^{1}/_{4}$ sec.09, T.19 S., R.13 W., Barton County, Hydrologic Unit 11030008, on left bank at downstream side of Cheyenne Bottoms diversion gate structure, 3 mi north of Great Bend, and at mile 13.5.

DRAINAGE AREA.--1,500 mi^2 , does not include Dry Walnut Creek basin, or any portion of the Arkansas River basin above the Dundee diversion.

PERIOD OF RECORD. -- October 1994 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,830.00 ft above sea level, from topographic map.

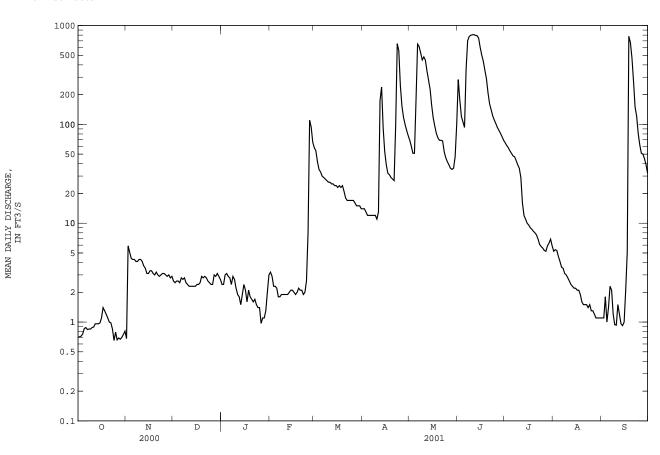
REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV DEC JAN FEB MAY AUG .70 .68 2.6 e2.4 3.2 e58 14 69 284 65 5.2 1.1 1 .71 .72 .76 2.4 5.9 2.5 2.9 54 1.1 14 60 176 61 5.4 3 5.1 2.3 42 13 51 120 58 53 1.8 2.6 35 1.0 4 4.4 3.1 2.3 12 51 106 54 4.6 .86 4.3 2.5 2.9 2.2 12 1.4 175 6 .88 2.8 2.8 1.8 12 648 360 48 2.3 4.3 30 3.6 .84 4.1 2.7 2.4 1.8 29 12 612 703 47 3.5 2.1 8 85 4 1 2.9 1 9 28 12 526 775 43 3 1 2.5 e1.9 27 12 798 .94 .85 4.3 449 39 3.0 10 .88 4.3 2.4 2.2 e1.9 26 11 482 806 36 2.8 .93 29 11 .89 4.1 e2.3 1.9 e1.9 26 13 446 809 2.6 1.5 e2.3 e2.3 25 25 795 790 2.4 12 .96 3.7 1.8 e1.9 174 346 16 1.2 13 3.5 1.5 239 .96 e2.0 281 12 .96 14 .96 3.1 e2.3 e2.1 24 92 227 747 11 .92 15 .98 3.1 e2.3 2.4 e2.1 24 53 156 602 10 2.2 1.0 23 9.6 16 1.1 3.3 e2.4 2.1 e2.0 39 116 502 2.1 2.1 17 18 1.4 3.3 e2.4 2.5 1.6 e1.9 e2.0 24 23 32 31 436 353 9.0 2.1 5.1 778 96 81 2.9 24 675 19 3.0 e2.2 291 8.3 1.6 20 1 1 3.2 2.8 1.7 e2.1 21 28 69 209 8.0 1.5 470 21 1.0 3.0 2.9 18 27 69 273 1.6 e2.1 162 .98 2.9 2.8 1.7 e1.9 e2.0 17 17 68 53 141 122 6.9 1.5 22 99 150 23 121 655 17 e2.5 e2.6 46 5.8 25 .79 3.1 e2.4 1.4 e8.0 17 246 42 102 5.6 1.3 62 26 3.0 .97 e110 17 39 93 5.3 51 27 .69 .67 2.9 3.0 3.0 2.9 1.1 e1.1 e94 16 15 118 36 87 5.2 5.9 1.2 50 28 35 81 100 45 e66 29 .70 3.1 e1.3 15 87 36 75 1.1 39 75 2.9 69 30 2.9 e2.0 ___ 15 77 47 6 9 1.1 32 .81 3.0 5.9 1.1 31 14 100 MEAN 89 3 49 2 60 2 02 11 8 25 1 99 1 180 360 22 3 2 44 95 1 1.4 5.9 3.1 110 58 655 809 MAX 3.1 648 65 5.4 MIN .65 .68 2.3 . 97 1.8 14 11 35 69 5.2 1.1 92 5900 11080 21420 AC-FT 54 207 160 124 653 1550 1370 150 5660

07142020 WALNUT CREEK BELOW CHEYENNE BOTTOMS DIVERSION NEAR GREAT BEND, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	12.3 30.0 1997 .043 1996	34.9 169 1997 .086 1995	12.9 56.5 1997 .065 1995	14.2 37.8 1997 .052 1995	20.9 59.2 1998 .050 1995	38.9 103 2000 .054 1995	54.7 122 1998 .050 1995	92.2 195 1995 2.44 1997	115 360 2001 18.6 1998	82.1 238 1999 22.3 2001	98.9 201 1999 2.44 2001	41.0 153 1996 .14 1995
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	OAR YEAR	FC	OR 2001 WA	TER YEAR		WATER YE	ARS 1995	- 2001
	MEAN CANNUAL M ANNUAL MI			43.2			66.7			51.7 69.7 27.4		1999 1995
	DAILY M			660	Jul 23		809	Jun 11		809		11 2001
	DAILY MEA	AN Y MINIMUM		.24	Sep 28 Sep 24		.65 .70			.00		1 1995 27 1995
MAXIMUM MUMIXAM	1 PEAK FLO 1 PEAK STA	OW AGE		.20	Sep 24		1170 21.58	Sep 18 Sep 18		1170 21.58	Sep : Sep :	18 2001 18 2001
	PANEOUS LO RUNOFF (A			31390			.46 48320	Nov 2		.00 37430	OCL	1 1995
	CENT EXCE	- ,		92			167			111		
	CENT EXCE			17			4.1			21		
90 PERC	CENT EXCE	EDS		.74			1.1			.09		



07142300 RATTLESNAKE CREEK NEAR MACKSVILLE, KS

LOCATION.--Lat $37^{\circ}52^{\circ}18^{\circ}$, long $98^{\circ}52^{\circ}33^{\circ}$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.16, T.25 S., R.14 W., Stafford County, Hydrologic Unit 11030009, on left bank at downstream side of county highway bridge, 8 mi southeast of Macksville, and at mile 87.5.

DRAINAGE AREA.--784 mi^2 , of which about 428 mi^2 is probably noncontributing.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,963.46 ft above sea level (Stafford County bench mark). Prior to July 14, 1960, nonrecording gage and crest-stage gages at same site and datum.

REMARKS. -- Records fair except those for estimated daily discharges, which are poor. Satellite telemeter at station.

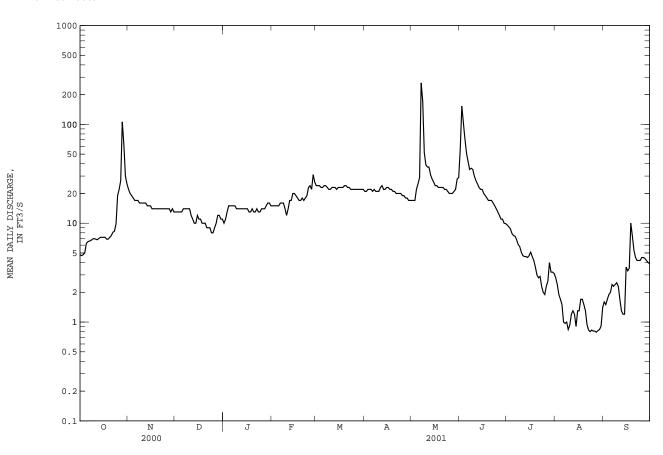
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 $\mathrm{ft^3/s}$ and maximum (*):

Date	Tim	ie	Discharge (ft ³ /s)		height (ft)		Date	Time	e	Discharge (ft ³ /s)		height (ft)
Oct 28 May 7	220 120		142 *385		5.63 7.50		Jun 2	200	0	180		6.05
		DISCHA	RGE, CUBI	C FEET PER		WATER YEA MEAN VAI		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	4.8 4.7 4.8 5.0 6.2	22 20 19 18 17	13 13 13 13 13	e10 e11 e13 15 15	15 15 15 15 15	24 24 24 23 23	21 21 22 22 22 22	17 17 17 22 25	57 153 103 71 51	9.6 9.2 8.8 7.9 7.5	2.8 2.4 1.9 1.7 1.5	1.6 1.5 1.7 1.9 2.0
6 7 8 9 10	6.5 6.6 6.7 6.9 7.0	17 17 16 16 16	14 14 14 14 14	15 15 15 14 14	16 16 e16 e14 e12	24 24 23 22 22	21 22 21 21 21	29 263 172 52 39	42 35 36 35 30	7.4 6.8 6.1 5.8 5.1	1.0 .97 1.0 .84 .93	2.4 2.3 2.4 2.5 2.3
11 12 13 14 15	6.9 6.8 7.0 7.2 7.2	16 16 15 15	e12 e11 e10 e10 e12	14 14 14 14 14	e14 17 17 20 20	23 23 23 22 23	23 24 22 22 23	37 37 31 28 26	27 25 23 22 22	4.7 4.6 4.6 4.5 4.7	1.2 1.3 1.2 .90 1.3	1.7 1.3 1.2 1.2 3.6
16 17 18 19 20	7.2 7.2 6.9 6.9 7.2	14 14 14 14	e11 e10 e10 e10	14 13 13 14 13	19 18 17 17	23 23 23 24 24	23 22 22 21 21	24 24 23 23 23	20 19 18 17 17	5.1 4.6 4.2 3.6 3.0	1.3 1.7 1.7 1.5	3.3 3.5 10 7.4 5.3
21 22 23 24 25	7.5 8.1 8.3 9.8	14 14 14 14 14	e9.0 e9.0 e9.0 e8.0 e8.0	13 14 13 13	17 18 19 23 24	23 23 22 22 22	20 20 20 20 20 19	23 22 22 21 20	17 16 15 14 13	2.8 2.9 2.3 2.0	.94 .83 .80 .83	4.5 4.2 4.2 4.2 4.5
26 27 28 29 30 31	22 27 106 63 30 25	14 14 13 14 13	e9.0 e10 e12 e12 e11 e11	14 14 15 16 16	22 31 26 	22 22 22 22 22 22 22	19 18 18 17 17	20 20 21 22 28 29	12 11 11 10 9.9	2.3 2.6 4.0 3.2 3.2 3.1	.81 .79 .82 .84 .91	4.5 4.4 4.2 4.0 3.9
MEAN MAX MIN AC-FT	14.7 106 4.7 903	15.4 22 13 918	11.3 14 8.0 694	13.9 16 10 855	18.1 31 12 1000	22.8 24 22 1400	20.8 24 17 1240	38.0 263 17 2330	31.7 153 9.9 1890	4.78 9.6 1.9 294	1.23 2.8 .79 76	3.39 10 1.2 202

07142300 RATTLESNAKE CREEK NEAR MACKSVILLE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	23.1 322 1974 .000 1992	18.7 118 1974 .011 1992	18.5 124 1974 .11 1992	18.1 94.1 1974 .12 1992	20.2 89.7 1974 .093 1992	30.8 188 1973 .099 1992	29.4 247 1973 .19 1992	34.6 156 1995 .067 1992	38.4 248 1975 4.08 1968	23.0 179 1993 .019 1991	16.7 68.4 1975 .000	36.2 671 1973 .000 1991
SUMMARY	STATIST:	ICS	FOR 2	2000 CALEN	DAR YEAR	FC	OR 2001 WA	TER YEAR		WATER YEA	ARS 1960	- 2001
	MEAN ANNUAL M			19.6			16.3			25.6 110 1.46		1973 1991
	DAILY ME			160 2.9	Mar 26 Sep 11		263 .79	May 7 Aug 27		7330		27 1973 5 1982
ANNUAL MAXIMUM	SEVEN-DAY	MUMINIM WC		3.1	Sep 6		.81 385	Aug 22 May 7		.00 17700	Aug 1 Sep 2	12 1988 26 1973
INSTANT	I PEAK STA CANEOUS LO	OW FLOW					7.50 .70			11.02		26 1973 t times
10 PERC	RUNOFF (A	EDS		14190 31			11810 24			18570 40		
	CENT EXCE			15 5.3			14 1.9			15 1.2		



07142575 RATTLESNAKE CREEK NEAR ZENITH, KS

LOCATION.--Lat $38^{\circ}05^{\circ}37^{\circ}$, long $98^{\circ}32^{\circ}45^{\circ}$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.33, T.22 S., R.11 W., Stafford County, Hydrologic Unit 11030009, on left bank at downstream side of county highway bridge, 3.0 mi west and 9.5 mi north of Zenith, and at mile 19.3.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--1,047 mi^2 , of which 519 mi^2 is noncontributing.

PERIOD OF RECORD. -- May 1973 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,790 ft above sea level, from topographic map. Prior to Aug. 9, 1995, water-stage recorder at site 2.8 mi downstream at different datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

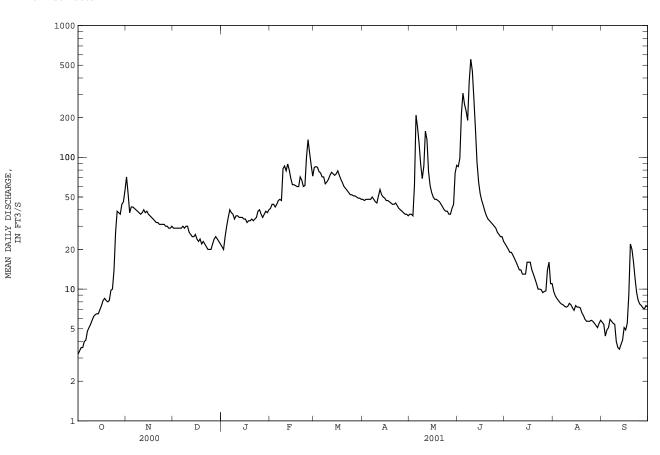
Date	Tim	ie	Discharge (ft ³ /s)	Gage	e height (ft)		Date	Time	è	Discharge (ft ³ /s)		height ft)
Jun 9	030	0	*607	*1	16.15		No oth	er peak gr	reater tl	nan base di	scharge.	
		DISCHA	ARGE, CUBIC	FEET PER		WATER YE. Y MEAN VA		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	3.2 3.4 3.6 3.6 4.0	71 53 38 42 42	29 29 29 29 29	e21 e20 e25 e30 e35	41 44 44 42 44	84 85 84 78 76	48 47 48 48	37 37 36 61 209	85 98 214 307 252	22 21 20 19 19	9.6 8.9 8.5 8.2 7.9	5.6 5.4 4.4 4.9 5.1
6 7 8 9 10	4.1 4.8 5.1 5.4 5.8	41 40 39 38 37	29 30 29 30 30	e40 e38 37 34 36	47 48 47 82 86	71 71 63 65 68	48 50 48 46 45	168 126 88 69 86	225 191 376 554 452	18 17 16 15 14	7.7 7.6 7.4 7.3 7.4	5.9 5.7 5.5 5.4 4.0
11 12 13 14 15	6.2 6.4 6.5 6.5 7.0	38 40 38 39 37	e27 e26 e25 e25 e26	36 35 35 35 34	79 89 80 69 62	73 77 e75 e73 e75	51 57 52 50 49	158 136 78 61 54	276 162 91 65 53	14 13 13 13 16	7.8 7.6 7.2 6.9 7.5	3.6 3.5 3.8 4.1 5.1
16 17 18 19 20	7.5 8.2 8.5 8.2	36 35 34 33 32	e24 e23 e24 e22 e23	34 32 33 e33 e34	62 e61 e60 60 71	79 73 e68 e64 60	47 47 46 45 44	e50 e48 e48 e47 e46	47 43 39 36 34	16 16 14 13	7.3 7.3 7.2 6.6 6.3	4.9 5.5 9.1 22 20
21 22 23 24 25	8.2 9.8 10 14 27	32 31 31 31 31	e22 e21 e20 e20 e20	e33 e34 35 39 40	67 60 61 100 136	58 56 54 52 52	44 45 43 41 40	e44 42 40 39 39	33 32 31 30 29	11 10 10 9.9 9.4	5.9 5.7 5.7 5.7 5.8	16 12 9.4 8.2 7.7
26 27 28 29 30 31	39 38 37 44 46 56	30 30 29 29 30	e22 e24 e25 e24 e23 e22	37 35 e37 39 38 40	108 87 72 	51 51 50 49 49	39 38 37 37 36	37 37 41 44 76 87	27 26 25 25 23	9.6 9.7 14 16 11	5.7 5.5 5.3 5.1 5.5 5.8	7.5 7.2 7.1 7.5 7.3
MEAN MAX MIN AC-FT	14.4 56 3.2 883	36.9 71 29 2200	25.2 30 20 1550	34.3 40 20 2110	68.2 136 41 3790	65.5 85 48 4030	45.5 57 36 2710	70.0 209 36 4300	129 554 23 7700	14.3 22 9.4 878	6.90 9.6 5.1 424	7.45 22 3.5 443

07142575 RATTLESNAKE CREEK NEAR ZENITH, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	43.8 691 1974 .046 1992	33.4 185 1974 3.27 1985	39.1 270 1974 5.56 1992	37.5 192 1974 6.48 1992	44.7 141 1974 6.64 1992	64.2 207 1987 7.78 1992	65.8 272 1976 6.47 1992	77.2 371 1995 5.24 1992		81.0 596 1993 10.2 1991	75.4 1099 1993 1.54 1991	21.4 79.5 1975 .88 1991	18.0 93.3 1996 .091 1991
SUMMARY	Y STATIST	ICS	FOR 2	000 CALEN	DAR YEAR	F	OR 2001 WA	TER YE	AR		WATER YEA	ARS 1974	- 2001
	MEAN F ANNUAL I ANNUAL M			48.3			42.8				50.2 186 6.59		1993 1991
	DAILY ME			691	Mar 25		554	Jun	9		13600		19 1993 14 1984
		AN Y MINIMUM		2.9 3.4	Sep 20 Sep 15		3.2 3.8	Oct Oct	1		.00		14 1984
	M PEAK FL						607	Jun	9		29300		18 1993
	M PEAK ST						16.15	Jun	9		17.18		2 1999
	FANEOUS L			25000			3.0	Oct	1		.00	Sep	14 1984
	RUNOFF (- ,		35090			31010				36350		
	CENT EXCE			86 36			77 34				82 29		
	CENT EXCE			5.9			5.9				4.7		
JO PERC	TEINI EVCE.	בעם		5.9			5.9				4./		

e Estimated



07142575 RATTLESNAKE CREEK NEAR ZENITH, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. -- November 1998 to current year.

PERIOD OF DAILY RECORD. --

SPECIFIC CONDUCTANCE: November 1998 to current year.

pH: November 1998 to current year.
WATER TEMPERATURE: November 1998 to current year.
DISSOLVED OXYGEN: November 1998 to current year.

TURBIDITY: November 1998 to current year.

INSTRUMENTATION. -- Multiparameter water-quality monitor.

REMARKS.--Records good. Interruptions in record are due to ice condtions or malfunction of the recording instrument or sensors. Instruments used to measure trubidity conform to ISO 7027 standards.

EXTREMES FOR PERIOD OF RECORD .--

SPECIFIC CONDUCTANCE: Maximum, 11,100 microsiemens/cm, Sept. 20, 2000; minimum, 164 microsiemens/cm, Mar. 25, 2000 pH: Maximum, 9.4 standard units, Aug. 4, 2000; minimum, 7.2 standard units, June 10, 2001.

WATER TEMPERATURE: Maximum, 36.5°C, July 29, 2001; minimum, -0.1 oC, Dec. 31, 1998.

DISSOLVED OXYGEN: Maximum 19.3 mg/L, Aug. 6, 1999; minimum, 3.2 mg/L, Aug. 25, 1999.

TURBIDITY: Maximum, 950 NTU, Feb. 26, 2001; minimum, 4 NTU, Sept. 15, 2000.

EXTREMES FOR CURRENT YEAR. --

SPECIFIC CONDUCTANCE: Maximum, 10,200 microsiemens/cm, Oct. 1; minimum, 568 microsiemens/cm, June 9.

PH: Maximum, 9.2 standard units, Sept. 15; minimum, 7.2 standard units, June 10. WATER TEMPERATURE: Maximum, 36.5°C, July 29; minimum, -0.1°C, Nov. 13. DISSOLVED OXYGEN: Maximum, 16.9 mg/L, June 22; minimum, 3.5 mg/L, June 10. TURBIDITY: Maximum, 950 ntu, Feb. 26; minimum, 4.5 ntu, Sept. 29.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER	2	N	OVEMBER		D	ECEMBER			JANUARY	
1 2 3 4 5	10200 10100 9770 9770 9440	9860 9610 9550 9310 8640	10000 9870 9660 9610 8940	1630 2240 3640 2790 2990	1310 1480 2240 2390 2790	1380 1930 2720 2600 2880	3490 3510 3610 3620 3550	3390 3470 3480 3390 3460	3440 3490 3530 3510 3500	3540 3770 3800 3400 3400	3240 3440 3300 3080 2950	3390 3580 3500 3270 3170
6 7 8 9 10	8970 9020 8920 8880 8800	8790 8880 8710 8690 8670	8900 8960 8820 8770 8740	3050 3160 3210 3200 3270	2970 3050 3110 3120 3180	3010 3110 3160 3150 3220	3520 3490 3440 3450	3390 3400 3380 3350 3340	3450 3440 3410 3390 e3350	3150 2940 2880 3580 3480	2660 2730 2800 2620 2340	2910 2810 2840 3090 2880
11 12 13 14 15	8940 8870 8550 8140 7660	8600 8540 8090 7660 7450	8790 8660 8310 7870 7500	3280 3330 3530 3300 3220	3190 3150 3140 2960 3120	3250 3210 3330 3160 3180	4370 4660 4000 3900	3620 3570	e3650 3830 e4100 e3900 3730	2860 2920 2940 2940 3060	2340 2850 2880 2910 2900	2650 2890 2910 2930 2970
16 17 18 19 20	7510 7340 7000 6710 6620	7340 7000 6710 6620 6490	7460 7220 6850 6680 6530	3320 3400 3390 3400 3430	3200 3230 3280 3320 3370	3260 3320 3340 3370 3400	3730 3810 3950 3540 3870	3470 3620 2910 2900 3430	3620 3720 3600 3320 3740	3130 3220 3280 4790 4820	3030 3130 3180 3220 3240	3080 3160 3230 3770 4130
21 22 23 24 25	6490 6400 6040 6030 4550	6400 5980 5990 4550 3240	6430 6090 6020 5260 3840	3460 3460 3480 3460 3460	3380 3390 3390 3390 3350	3420 3430 3430 3420 3400	3830 3740 3800 3830 4880	3380 3520 3120 2880 3830	3580 3650 3680 3410 4400	4760 3290 4310 2940 3120	2750 2720 2740 2580 2860	3710 3100 3360 2680 3000
26 27 28 29 30 31	3240 1900 2170 2410 2690 2330	1900 1710 1740 2070 2330 1630	2460 1790 1960 2190 2550 1960	3440 3440 3420 3440 3450	3370 3330 3350 3340 3380	3400 3390 3390 3390 3410	4730 3740 4340 4020 3680 3620	3580 3320 3700 3590 3490 3240	4180 3530 3990 3790 3590 3480	3150 3150 3730 4660 3350 2810	2860 3040 2960 2910 2810 2400	3010 3110 3160 3430 3180 2570
MONTH	10200	1630	6730	3640	1310	3140	4880	2880	3650	4820	2340	3140

07142575 RATTLESNAKE CREEK NEAR ZENITH, KS--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

							•					
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	2940 2990 3380 3160 3200	2770 2870 2850 2960 3010	2880 2930 3060 3090 3100	2960 2630 2450 2500 2610	2370 2280 2290 2440 2490	2660 2480 2370 2470 2550	3080 3090 3080 3030 3000	3000 3030 3020 2990 2970	3040 3060 3050 3010 2990	3550 3530 3590 3590 2780	3420 3270 3500 2780 1280	3490 3420 3530 3220 1470
6 7 8 9 10	3010 2660 2630 4150 3860	2660 2500 2500 2580 2680	2840 2560 2570 2890 3270	2740 2780 2860 2850 2890	2610 2720 2770 2800 2800	2670 2750 2820 2820 2840	3000 2980 2990 2960 2990	2940 2890 2900 2850 2830	2980 2930 2940 2910 2900	e1290 1560 2200 2510 2190	1240 1250 1560 2190 1210	e1270 1410 1840 2390 1770
11 12 13 14 15	3360 3140 2800 2800 2700	2330 2540 2460 2380 2090	2800 2790 2640 2620 2430	2940 2980 2920 2870 3020	2840 2920 2840 2830 2760	2890 2960 2890 2850 2890	3120 2690 2770 2920 2970	2630 2340 2660 2730 2860	2970 2520 2730 2820 2910	1210 1210 2110 2380 2590	634 696 1210 2110 2380	752 905 1700 2310 2480
16 17 18 19 20	2670 3100 3250 2990 2630	2100 2180 2300 2370 2380	2380 2660 2690 2670 2580	3080 2820 2760 2860 2860	2710 2760 2730 2740 2810	2890 2800 2740 2800 2850	3050 3050 3070 3120 3120	2920 2910 2890 3060 3070	2970 2970 2950 3080 3090	2900 3040 3280 3330 3330	2590 2900 2940 3260 3190	2800 2990 3100 3300 3290
21 22 23 24 25	2620 2700 2730 2700 1730	2590 2550 2610 1730 1400	2610 2640 2710 2350 1470	2820 2820 2860 2990 3000	2760 2760 2790 2840 2900	2790 2790 2830 2920 2940	3120 3210 3280 3340 3430	3070 3080 3170 3190 3340	3100 3130 3230 3250 3370	3420 3490 3530 3560 3610	3290 3380 3380 3420 3450	3350 3440 3460 3500 3550
26 27 28 29 30 31	1530 2080 2490 	1400 1410 2080 	1470 1690 2350 	3060 3060 3060 3090 3060 3070	2990 3040 3030 3040 3030 3000	3030 3050 3050 3050 3050 3030	3430 3400 3440 3500 3540	3350 3340 3350 3420 3450	3370 3370 3380 3450 3500	3660 3630 3520 3270 3030 2080	3500 3350 3270 2680 2080 1840	3580 3550 3440 2950 2690 1970
	4150	1400	2600	3090	2280	2820	3540	2340	3070	3660	634	2670
MONTH	1150	1400	2000									
MONTH	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
			MEAN	MAX		MEAN		MIN AUGUST	MEAN	MAX	MIN SEPTEMBE	
		MIN JUNE 1740 1720 852	MEAN 1840 1900 1410 816 843	MAX 4780 4920 5100 5390 5620	MIN JULY 4560	MEAN 4670 4780 4930 5180 5380			MEAN 7100 7760 8280 8620 8760		SEPTEMBE 9040	
DAY 1 2 3 4	MAX 1910 2000 1930 852	MIN JUNE 1740 1720 852 805	MEAN 1840 1900 1410 816 843	MAX	MIN JULY 4560 4620 4730 4910 5100	4670 4780 4930 5180	7600 8110 8500 8680	AUGUST 6750 7560 8110 8500 8660 8730 8570 8510 8420	7100 7760 8280 8620	9410 9280 9770 9580	9040 8910 9280 9090	9290 9120 9540 9270
DAY 1 2 3 4 5 6 7 8 9	MAX 1910 2000 1930 852 854 884 1230 1320	MIN JUNE 1740 1720 852 805 825 827 884	MEAN 1840 1900 1410 816 843 844 1040 e965 e600	MAX 4780 4920 5100 5390 5620 5910 6020 6300 6520	MIN JULY 4560 4620 4730 4910 5100 5350 5640 5750 5940	4670 4780 4930 5180 5380 5650 5860 6060 6260 6500	7600 8110 8500 8680 8850 8870 8800 8710 8710	AUGUST 6750 7560 8110 8500 8660 8730 8570 8510 8420 8350 8510	7100 7760 8280 8620 8760 8820 8720 8620 8570 8480	9410 9280 9770 9580 9260 9110 8380 8810	9040 8910 9280 9090 9070 8880 7730 7710 8370	9290 9120 9540 9270 9150 9070 8700 8050 8560
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14	MAX 1910 2000 1930 852 854 884 1230 1320 1930 2740 3180	MIN JUNE 1740 1720 852 805 825 827 884 1070 1930 2740	1840 1900 1410 816 843 844 1040 e965 e600 e670 e870 1450 2370 3000	MAX 4780 4920 5100 5390 5620 5910 6020 6300 6520 6800 7080 7520 7730 7940	MIN JULY 4560 4620 4730 4910 5100 5350 5640 5750 5940 6230 6470 6770 7180 7450	4670 4780 4930 5180 5380 5650 5860 6060 6260 6500 6670 7060 7520 7670	7600 8110 8500 8680 8850 8870 8800 8710 8580 8820 8650 8770 8930	AUGUST 6750 7560 8110 8500 8660 8730 8570 8510 8420 8350 8510 8580 8580 8580 8680	7100 7760 8280 8620 8760 8820 8720 8620 8570 8480 8710 8600 8670 8790	9410 9280 9770 9580 9260 9110 8380 8810 9750 9930 10000 9830 9510	9040 8910 9280 9090 9070 8880 7730 7710 8370 8750 9520 9640 9210 9160	9290 9120 9540 9270 9150 9070 8700 8050 8560 9260 9730 9880 9520 9310
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	MAX 1910 2000 1930 852 854 884 1230 1320 2740 3180 3430 3580 3670 3790 3890	MIN JUNE 1740 1720 852 805 825 827 884 1070 1930 2740 3180 3430 3530 3650 3760	MEAN 1840 1900 1410 816 843 844 1040 e965 e600 e670 e870 1450 2370 3300 3340 3530 3620 3730 3830	MAX 4780 4920 5100 5390 5620 5910 6020 6300 6520 6800 7080 77520 7730 7740 6980 5940 6650 7250	MIN JULY 4560 4620 4730 4910 5100 5350 5540 5750 5940 6230 6470 6770 7180 7450 6820 4920 4620 5280 5280	4670 4780 4930 5180 5380 5650 5860 6060 6260 6500 6670 7060 7520 7670 7150 6140 5480 6060 6820	7600 8110 8500 8680 8850 8870 8870 8710 8710 8580 8820 8650 8777 8930 9110 9160 9030 8660 8830	AUGUST 6750 7560 8110 8500 8660 8730 8570 8510 8420 8350 8510 8580 8660 8890 8490 8470 8510	7100 7760 8280 8620 8760 8820 8750 8620 8570 8480 8710 8670 8670 8890 89040 8680 8680 8670	9410 9280 9770 9580 9260 9110 8380 8810 9750 9930 10000 9830 9510 9380 8810 9080 6060 6380	9040 8910 9280 9090 9070 8880 7730 7710 8370 8750 9520 9640 9210 9160 7750 8140 4370 4510 2320	9290 9120 9540 9540 9270 9150 9070 8700 8050 8560 9260 9730 9880 9520 9310 8530 8510 8460 5470 3370
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	MAX 1910 2000 1930 852 854 884 1230 1930 2740 3180 3430 3580 3670 3790 3890 4020 4040 4010	MIN JUNE 1740 1720 852 805 825 827 884 1070 1930 2740 3180 3430 3650 3760 3870 3910 3830	1840 1900 1410 816 843 844 1040 e965 e600 e670 2370 3300 3340 3530 3620 3730 3830 3940 3980 3990 e3950 e4050	MAX 4780 4920 5100 5390 5620 5910 6020 6300 6520 6800 7080 77520 7730 7940 7740 6980 5940 6650 7780 8010 8150 8900 99100	MIN JULY 4560 4620 4730 4910 5100 5350 5640 5750 5940 6230 6470 6770 7180 7450 6820 4920 4620 4920 4620 5280 6430 7030 7610 8010 8010 8010 8900	4670 4780 4930 5180 5380 5650 6860 6260 6500 6670 7060 7520 7670 7150 6140 5480 6060 6820 7330 7780 8100 8540 9000	7600 8110 8500 8680 8870 8870 8710 8710 8580 8930 9110 9160 9030 8660 8830 9120 9520 9600 9720 9640	AUGUST 6750 7560 8110 8500 8660 8730 8570 8510 8420 8350 8510 8580 8610 8890 8470 8510 8790 9120 9450 9530 9330	7100 7760 8280 8620 8760 8820 8760 8820 8570 8480 8710 8670 8670 8880 9040 8680 8540 8670 8930 9320 9530 9650	9410 9280 9770 9580 9260 9110 8380 8810 9750 9930 10000 9830 9510 9380 6060 6380 3310	9040 8910 9280 9090 9070 8880 7730 8750 9520 9640 9210 9160 7750 8140 4370 4510 2320 1970 1960 3640 4920 5890	9290 9120 9540 9270 9150 9070 8700 8050 8560 9260 9730 9880 9520 9530 8530 8510 8460 5470 2570 2720 4270 5310 6270

e Estimated

ARKANSAS RIVER BASIN

07142575 RATTLESNAKE CREEK NEAR ZENITH, KS--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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DAY	MAX	MIN I	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		OCTOBER		:				DECEMBER			JANUAR	
1 2 3 4 5	8.4 8.4 8.5 8.5	7.8 7.6 7.8 7.9 7.9		8.0 8.1 8.1 8.2 8.3	7.9 8.0 8.0 8.1 8.1	8.0 8.1 8.1 8.1 8.2				7.9 7.9 7.9 8.0 8.0		
7 8 9	8.7 8.7	8.2 8.2 8.1 8.1	8.4 8.5 8.4 8.4	8.3 8.3 8.4 8.4	8.2 8.2 8.2 8.2 8.2	8.3 8.3 8.3 8.3	8.2 8.2 8.2 8.2 8.2	8.0 8.0 8.0 8.0	8.1 8.1 8.1 8.1 e8.2	8.0 8.1 8.1 8.1	7.9 7.9 7.9 7.9 8.0	7.9 8.0 8.0 8.0
12 13 14	8.6 8.8 8.9 8.8	8.2 7.9 7.9 7.9	8.4 8.4 8.4 8.3	8.4 8.2 8.3 8.3	8.2 8.2 8.2 8.2 8.1	8.3 8.2 8.3 8.3	8.1 8.1 7.9 7.8	8.0 7.9 7.8 7.7 7.6	e8.1 8.0 7.8 7.7 7.7	8.2 8.2 8.2 8.2	7.9 7.9 8.0 8.0	8.0 8.1 8.1 8.1
17 18	8.7 8.6 8.6 8.5 8.5	7.8 7.8 7.8 7.8 7.8	8.3 8.2 8.1 8.1 8.1	8.1 8.1 8.1 8.2	8.0 8.0 8.0 8.0	8.1 8.1 8.1 8.1	7.8 7.9 7.8 7.8	7.7 7.7 7.7 7.7 7.7	7.7 7.8 7.8 7.8 7.8	8.1 8.1 8.0 8.0	8.0 8.0 8.0 8.0 7.9	8.1 8.0 8.0 8.0
21 22 23 24 25	8.3 8.3	7.8 7.8 7.8 7.8 7.7	8.0 8.0 7.9 7.8	8.2 8.2 8.2 8.2 8.3	8.0 8.0 8.0	8.1 8.1 8.1 8.2				8.0 8.2 8.2 8.2 8.2	8.0 8.0 8.0 8.1 8.1	8.0 8.0 8.1 8.1
27 28 29	7.8 7.8 8.0 8.1 8.3 8.1	7.7 7.7 7.8 7.9 8.0 8.0	7.7 7.8 7.8 8.0 8.1 8.1	8.2 8.3 8.3 8.4 8.3	8.1 8.1 8.1 8.1	8.2 8.2 8.3 8.3	7.7 7.7 7.8 7.9 7.9 7.9	7.6 7.7 7.6 7.7 7.8 7.8	7.7 7.7 7.7 7.8 7.9 7.8	8.3 8.2 8.1 8.1 8.2 8.2	8.1 8.0 8.0 8.1 8.1	8.1 8.1 8.1 8.1 8.1
MAX MIN	8.9 7.8	8.2 7.6	8.5 7.7	8.4 8.0	8.2 7.9	8.3 8.0	8.3 7.7	8.0 7.6	8.2 7.7	8.3 7.9	8.1 7.7	8.1 7.8
DAY	MAX	MIN I	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		FEBRUARY			MARCH			APRIL			MAY	
					MARCH			APRIL		8.4 8.5 8.4 8.2 7.7	MAY	
1 2 3 4 5	8.2 8.2 8.2 8.2 8.3	### FEBRUARY 8.1	8.1 8.1 8.1 8.2 8.2		7.8 7.9 8.0 8.0	7.9 8.0 8.0 8.0	8.6 8.5 8.6 8.7 8.7	APRIL 8.2 8.3 8.2 8.3 8.3	8.4 8.4 8.4 8.5		MAY 8.0 8.0 8.1 7.7 7.6	8.2 8.2 8.2 8.1 e7.7
1 2 3 4 5 6 7 8 9	8.2 8.2 8.2 8.3 8.3 8.3 8.2 8.1	### FEBRUARY 8.1	8.1 8.1 8.1 8.2 8.2 8.2 8.2 8.1 8.0	8.0 8.1 8.1 8.1 8.2 8.2 8.2	7.8 7.9 8.0 8.0 8.0 8.1 8.1	7.9 8.0 8.0 8.0 8.1 8.1 8.1 8.2 8.2	8.6 8.5 8.6 8.7 8.7 8.6 8.7 8.7	APRIL 8.2 8.3 8.2 8.3 8.3 8.3 8.2 8.3 8.2 8.3 8.4 8.3 8.2	8.4 8.4 8.5 8.4 8.5 8.4 8.5 8.4	8.4 8.5 8.4 8.2 7.7	MAY 8.0 8.0 8.1 7.7 7.6 7.7 7.8 7.9 7.6	8.2 8.2 8.1 e7.7 e7.8 7.8 8.0 8.1 7.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14	8.2 8.2 8.2 8.3 8.3 8.3 8.3 8.2 8.1	### REBRUARY 8.1	8.1 8.1 8.2 8.2 8.2 8.2 8.2 8.1 8.0 8.0 8.1 8.1	8.0 8.1 8.1 8.1 8.2 8.2 8.3 8.3 8.3	7.8 7.9 8.0 8.0 8.1 8.1 8.1 8.1 8.1 8.1	7.9 8.0 8.0 8.0 8.1 8.1 8.1 8.2 8.2	8.6 8.5 8.6 8.7 8.7 8.7 8.7 8.7 8.7 8.3 8.5 8.5	APRIL 8.2 8.3 8.3 8.3 8.3 8.2 8.3 8.4 8.3 8.2 8.1 8.2 8.2	8.4 8.4 8.5 8.4 8.5 8.4 8.4 8.4 8.2 8.3	8.4 8.5 8.4 8.2 7.7 7.9 8.1 8.2 8.0 7.7 7.9 8.1 8.2	MAY 8.0 8.0 8.1 7.7 7.6 7.7 7.8 7.9 7.7 7.6 7.7 9 8.0	8.2 8.2 8.1 e7.7 e7.8 7.8 8.0 8.1 7.8 7.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	8.2 8.2 8.2 8.3 8.3 8.3 8.2 8.1 8.0 8.1 8.1 8.2 8.1 8.2	### REBRUARY 8.1	8.1 8.1 8.2 8.2 8.2 8.2 8.2 8.1 8.0 8.0 8.1 8.1 8.1 8.1	8.0 8.1 8.1 8.1 8.2 8.2 8.3 8.3 8.3 8.3 8.3 8.3 8.3	MARCH 7.8 7.9 8.0 8.0 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.2 8.1	7.9 8.0 8.0 8.0 8.1 8.1 8.1 8.2 8.2 8.2 8.2 8.2 8.2	8.6 8.5 8.6 8.7 8.7 8.7 8.7 8.7 8.3 8.5 8.6 8.6 8.6 8.6	APRIL 8.2 8.3 8.3 8.3 8.2 8.3 8.4 8.4 8.3 8.2 8.2 8.1 8.2 8.2 8.2 8.2 8.2 8.2	8.4 8.4 8.5 8.4 8.5 8.4 8.4 8.2 8.3 8.3 8.4 8.4 8.4	8.4 8.5 8.4 8.2 7.7 7.9 8.1 8.2 8.0 7.7 7.9 8.1 8.2 8.3	MAY 8.0 8.0 8.1 7.7 7.6 7.7 7.8 7.9 7.6 7.7 98.0 8.1 8.1 8.1 8.1 8.1	8.2 8.2 8.1 e7.7 e7.8 7.8 8.0 8.1 7.7 7.8 8.1 8.1 8.1 8.1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	8.2 8.2 8.2 8.2 8.3 8.3 8.3 8.2 8.1 8.0 8.1 8.1 8.2 8.2 8.3 8.3 8.3 8.3	### REBRUARY 8.1	8.1 8.1 8.2 8.2 8.2 8.2 8.2 8.1 8.0 8.0 8.1 8.1 8.1 8.1 8.1 8.2 8.2 8.2	8.0 8.1 8.1 8.1 8.2 8.2 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3	MARCH 7.8 7.9 8.0 8.0 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	7.9 8.0 8.0 8.0 8.1 8.1 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2	8.6 8.5 8.7 8.7 8.7 8.7 8.7 8.7 8.3 8.5 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6	APRIL 8.2 8.3 8.3 8.2 8.3 8.4 8.4 8.4 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2	8.4 8.4 8.5 8.4 8.5 8.4 8.4 8.2 8.3 8.4 8.4 8.4 8.4 8.4 8.4 8.5	8.4 8.5 8.4 8.2 7.7 7.9 8.1 8.2 8.0 7.7 7.9 8.1 8.2 8.3 8.4 8.6 8.6 8.6	MAY 8.0 8.0 8.1 7.7 7.6 7.7 7.8 7.9 7.7 7.6 7.7 8.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.2 8.2 8.1 e7.7 e7.8 7.8 8.0 8.1 7.7 7.8 8.1 8.1 8.1 8.2 8.3 8.3 8.3 8.3

07142575 RATTLESNAKE CREEK NEAR ZENITH, KS--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

	111,	Will Dic,	WIIOLL,	I IDDD, DIII	WDIED OI	1110, 11111	DIC IDIAC OC	TODBIC 20	00 10 001	I III III II II I	01	
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			JULY			AUGUST			SEPTEMB	ER
1 2 3 4 5	8.1 8.2 8.0 7.5 7.5	7.9 7.8 7.5 7.4 7.5	8.0 8.0 7.7 7.4 7.5	8.9 8.9 8.8 8.8	7.8 7.9 7.9 7.9 7.8	8.5 8.5 8.4 8.3	8.8 8.8 8.7 8.7	8.0 7.9 7.9 7.8 7.7	8.4 8.4 8.3 8.3	8.8 8.8 8.7 8.9 8.7	7.9 7.9 7.8 7.8 7.9	8.3 8.3 8.2 8.2
6 7 8 9 10	7.6 7.7 7.7 7.4 7.4	7.5 7.6 7.4 7.3 7.2	7.5 7.6 7.5 7.3	8.8 8.8 8.7 8.7	7.9 7.9 7.9 7.9 7.8	8.5 8.4 8.4 8.3	8.8 8.9 8.8 8.7 8.9	7.7 7.8 7.8 7.7 7.9	8.3 8.3 8.3 8.3	8.8 8.9 8.9 8.8	7.9 7.9 8.1 8.1 8.0	8.4 8.4 8.4 8.4
11 12 13 14 15	7.6 7.9 8.1 8.3 8.6	7.4 7.6 7.7 7.8 7.9	7.5 7.7 7.9 8.1 8.2	8.7 8.8 8.7 8.8 8.9	7.9 7.9 7.9 7.9 7.9	8.3 8.4 8.3 8.4 8.4	8.9 8.9 8.9 8.8 8.9	8.0 7.9 7.8 7.9 7.9	8.4 8.4 8.4 8.4	8.9 8.9 9.1 9.1 9.2	8.1 8.0 8.0 8.1 8.1	8.4 8.3 8.5 8.5
16 17 18 19 20	8.6 8.4 8.5 8.6	8.1 8.1 7.9 7.9 7.9	8.3 8.3 8.1 8.3 8.2	9.0 9.0 8.9 8.9	7.9 7.8 8.0 7.9 7.9	8.6 8.6 8.5 8.4 8.5	8.8 8.8 8.7 8.7	7.8 7.8 7.8 7.8 7.9	8.3 8.2 8.3 8.3	9.1 9.1 8.8 8.4 8.2	8.2 8.1 8.3 7.9 8.1	8.5 8.4 8.4 8.1 8.2
21 22 23 24 25	8.8 8.8 8.8 8.8	7.9 7.8 7.8 7.8 7.8	8.4 8.5 8.5 8.4 8.5	8.8 8.8 8.7 8.7	7.9 8.1 8.1 7.9 7.9	8.4 8.4 8.3 8.3	8.7 8.6 8.7 8.8 8.8	7.9 7.9 7.8 7.9	8.3 8.2 8.2 8.3 8.2	8.2 8.2 8.3 8.4	7.8 8.0 8.1 8.2	8.0 8.1 8.2 8.3 e8.3
26 27 28 29 30 31	8.9 9.0 9.0 8.9	7.8 7.9 7.9 7.9 7.8	8.5 8.6 8.6 8.6	8.9 8.8 9.1 9.0 8.9 8.9	7.9 8.0 7.9 8.0 8.2 8.1	8.4 8.5 8.4 8.6 8.5	8.8 8.8 8.8 8.6 8.8	7.8 7.9 7.9 7.9 7.9	8.3 8.3 8.3 8.3 8.2	8.5 8.7 8.8 9.0 9.1	8.3 8.3 8.2 8.3	e8.4 8.5 8.5 8.7 8.7
MAX MIN	9.0 7.4	8.1 7.2	8.6 7.3	9.1 8.7	8.2 7.8	8.6 8.3	8.9 8.6	8.0 7.7	8.4 8.2	9.2 8.2	8.3 7.8	8.7 8.0

e Estimated

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		N	OVEMBER		DE	ECEMBER			JANUARY	
1 2 3 4 5	25.2 26.5 29.2 19.1 15.0	12.8 13.4 14.7 12.5 8.7	17.9 19.0 20.8 15.1 13.7	17.5 16.2 12.6 14.0 15.4	14.1 11.8 9.9 9.5 12.3	16.3 13.7 11.3 11.7 13.7	3.8 2.1 3.7 5.8 5.2	.6 1.1 1 1	2.1 1.5 1.2 2.2 2.5	.0 .0 .1 .1	1 1 1 1	1 1 .0 .0
6 7 8 9 10	9.3 17.6 17.3 16.1 14.4	5.9 5.2 3.5 3.4 3.8	7.6 10.2 9.5 8.8 8.3	14.5 8.5 6.4 7.6 7.4	5.8 3.8 3.6 1.8	9.0 5.8 4.9 4.3 4.3	5.9 6.5 5.7 6.7 3.6	1.7 1.5 2.7 1.5 1	3.5 3.8 4.0 3.7 e1.2	.1 1.7 4.8 4.9 5.1	1 1 .2 1 1.0	.0 .2 2.2 2.1 2.9
11 12 13 14 15	18.4 20.2 22.5 23.2 19.5	5.6 9.7 13.9 14.6 14.7	11.1 14.5 17.3 17.9 16.9	4.5 5.0 3.9 5.4 8.2	3.3 .5 1 1 1.8	3.9 2.4 1.1 2.0 4.3	1 .1 1 .0	1 1 1 1	1 .0 1 e1	8.1 8.0 6.0 5.3 4.8	3.6 2.7 4.3 1.4	5.2 5.1 5.1 3.2 2.2
16 17 18 19 20	22.0 23.9 23.7 22.7 22.7	15.3 12.6 13.4 12.9 13.1	17.9 17.4 17.7 17.0 17.3	5.5 5.1 5.5 6.6 6.0	1.1 1 .0 1.3 1.8	3.1 1.9 2.4 3.4 3.4	.1 .1 .1 .1	1 1 1 1	.0	1.9 3.8 2.0 .0	.7 1 1 1	1.3 1.3 .5 1 1
21 22 23 24 25	17.7 19.4 20.5 20.6 18.1	15.9 15.6 16.0 17.5 16.1	16.6 17.0 18.2 18.6 16.9	7.1 4.9 5.8 6.4 6.9	.3 1.8 1.6 1.7	3.3 3.3 3.7 3.8 3.9	.1 .1 .1 .1	1 1 1 1	.0 .0 .0 .0	.5 4.7 5.7 6.6 4.7	1 1 1.2 1.3	.0 1.7 3.3 3.6 2.3
26 27 28 29 30 31	20.5 19.7 20.1 18.2 19.1 18.8	16.1 17.9 17.9 15.1 12.9 15.9	17.7 18.6 18.6 16.5 15.9	7.2 6.6 8.4 7.3 6.6	1.1 1.6 3.4 2.4 1.3	3.9 4.1 5.4 4.5 3.8	1 .0 .0 .0 .1 1	1 1 1 1 1	1 1 1 .0 .0	5.9 2.5 .0 2.3 4.7 5.9	1.5 1 1 1 .9	3.2 1.2 .0 .7 2.4 3.1
MONTH	29.2	3.4	15.7	17.5	1	5.4	6.7	1	.8	8.1	1	1.7

arkansas river basin 355

07142575 RATTLESNAKE CREEK NEAR ZENITH, KS--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Ferrical	DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
5 8.8 2.2 5.1 8.9 4.2 5.9 19.8 12.8 15.7 21.7 22.4 17.8 19.8 19.8 7 9.8 37. 6.4 10.8 5.2 7.4 11.9 11.5 17.7 22.4 17.8 19.8 19.8 7 9.8 37 6.4 10.8 5.2 7.4 21.2 12.2 12.2 16.3 22.3 17.9 19.8 20.2 10.9 10.0 -1.1 -0.1 11.6 6.8 9.8 9.7 22.2 11.5 17.5 21.6 17.8 21.6 17.8 20.2 10.9 10.0 -1.1 -1.1 11.6 7.5 9.9 10.0 10.0 -1.1 -1.1 11.6 7.5 9.6 10.0 11.5 11.5 17.6 21.6 17.8 20.2 11.5 17.8 20.2 11.5 17.8 21.6 17.8 20.2 11.5 17.8 21.6 17.8 20.2 11.5 17.8 21.6 17.8 20.2 11.5 17.8 20.2 11.5 17.8 20.2 11.5 17.8 21.6 17.8 20.2 11.5 17.8 20.2 11.5 17.8 20.2 11.5 17.8 20.2 11.5 17.8 21.6 17.8 20.2 11.5 17.8 20.2 11.5 17.8 20.2 11.5 17.8 20.2 11.5 17.8 20.2 11.5 17.8 20.2 11.5 17.8 20.2 11.5 17.8 20.2 11.5 17.8 20.2 17.9 17.8 20.2 17.9 17.5 17.5 17.5 17.5 17.5 17.5 17.5 17.5			FEBRUARY			MARCH			APRIL			MAY	
7 9.8 3.7 6.4 10.8 5.9 87.7 22.2 12.2 16.3 22.3 17.9 19.8 6.7 7. 0.0 4.6 12.4 5.9 87.7 22.2 11.5 11.5 17.6 23.6 17.8 20.2 9.8 6.7 7. 0.0 4.6 12.4 5.9 8.7 22.2 11.5 13.5 17.6 23.6 17.8 20.2 1.0 0.0 0.1 1.0 1.1 11.6 7.5 8.6 8.9 8.8 22.1 15.1 15.1 18.6 25.8 17.6 21.4 21.4 11.1 11.1 1.1 1.1 1.1 1.1 0.0 7.5 5.5 6.4 8.9 8.2 21.1 15.1 15.1 18.6 25.8 17.6 21.4 23.8 17.6 21.4 13.1 11.1 11.1 1.1 1.1 1.1 1.1 1.1 1.1	2 3 4	5.0 4.6 7.1	1 1.4 1.2	1.8 2.8 3.7	7.8 10.4 7.2	1 2.3 4.3 4.9 4.2	1.5 4.6 6.8 6.1 5.9	13.7 14.6 13.9	12.1 12.4 11.5	12.8 13.5 12.6	22.8 19.4 17.9	17.8 15.6 16.6	20.2 17.6 17.2
11	7 8 9	9.8 7.7 .0	3.7 .0 1	5.7 6.4 4.6 .0	9.5 10.8 12.4 13.8 11.6	5.2 5.9 6.8			12.2 13.5 15.1	16.3 17.6 18.6	22.3 23.6 25.8	17.9 17.8 17.6	19.9 20.2 21.4
20	12 13 14	.0 4.8 3.8	1 .0 1	.0 2.1 1.6	10.6 14.1 16.1	3.8 5.9 8.5	6.4 7.0 9.5 11.9	18.4 17.5 20.4 17.5	8.9 11.9 13.3	12.8 15.6 15.0	25.3 27.0 27.4	20.7 20.9 20.3	22.8 23.6 23.6
26 6.1 4.5 5.2 8.9 5.9 7.2 23.6 15.5 19.6 26.3 17.9 21.3 28.0 0.0 0.0 1.29 5.3 8.4 23.9 15.5 19.6 26.3 17.9 21.3 28.0 0.0 .0 0.0 12.9 5.3 8.4 23.9 15.5 19.6 26.3 17.9 21.3 29.0 17.4 22.3 29.0 17.0 15.6 7.8 11.3 23.4 15.0 18.6 22.8 19.4 21.1 30.0 17.0 16.3 9.4 12.6 17.0 15.1 18.8 22.4 17.8 19.7 31 1 17.6 9.1 13.0 24.0 15.1 18.6 22.8 19.4 21.1 18.7 MONTH 9.81 2.6 17.9 1.1 8.6 24.5 7.7 16.1 31.0 12.3 20.7 18.7 18.1 18.7 18.1 18.7 18.1 18.7 18.1 18.7 18.1 18.7 18.1 18.7 18.1 18.7 18.1 18.7 18.1 18.7 18.1 18.1	17 18 19	.5 2.5 7.9	1 1 .6	.0 .8 3.8 4.7	11.8 8.3 10.5 14.6	2.2 5.2 6.9 6.5 6.4	5.6 8.2 7.5 8.0 10.1	16.9 17.6 19.2	7.7 9.4 10.9	12.0 13.1 14.6	26.2 25.6 25.8	20.9 19.4 19.9	23.6 21.8 22.8
28	22 23 24	6.4 4.3 7.4	.0 3.7 3.7	1.9 3.0 4.0 5.2 4.8	16.6 15.9 17.9 12.3 9.7	10.5 10.6 6.6			13.4 9.0 11.0	18.5 13.4 15.5	21.4 23.5 19.8	13.1 14.7 13.8	17.2 18.6 16.4
DAY MAX MIN MEAN MAX MIN MEAN MAX MIN MEAN MIN	27 28 29 30	4.7 .0 	.0 .0 	2.0	7.9 12.9 15.6 17.6	6.0 5.3 7.8 9.1	6.7 8.4 11.3 13.0	24.0	15.5 15.5 15.0 15.1	19.6 19.2 18.6 18.8	26.3 28.0 22.8 22.4	17.9 17.4 19.4 17.8	21.3 22.3 21.1 19.7
Table Tabl	MONTH	9.8	1	2.6	17.9	1	8.6	24.5	7.7	16.1	31.0	12.3	20.7
1 22.9 17.1 19.9 31.9 23.8 27.6 34.4 22.3 27.7 32.8 19.3 25.0 2 24.3 18.2 20.9 32.5 23.4 27.5 35.0 23.3 28.8 32.0 19.6 25.1 3 21.3 17.9 19.0 33.2 22.8 27.7 35.8 24.2 28.9 33.8 20.7 25.8 4 20.9 16.8 18.5 35.2 23.8 29.1 34.1 22.4 27.6 32.9 20.8 26.3 5 19.9 18.5 19.1 30.9 24.8 27.4 34.8 22.6 28.2 30.5 21.5 24.7 6 22.4 18.6 20.2 33.0 23.2 27.5 36.5 23.4 29.0 29.9 24.7 7 23.7 21.7 22.4 33.3 22.6 27.4 33.3 22.2 27.4 28.2 19.6 23.2 8 25.2 20.3 22.6 32.4 22.6 </td <td></td>													
2 24.3 18.2 20.9 32.5 23.4 27.5 35.0 23.3 28.8 32.0 19.6 25.1 3 21.3 17.9 19.0 33.2 22.8 27.7 35.8 24.2 28.9 33.8 20.7 25.8 4 20.9 16.8 18.5 35.2 23.8 29.1 34.1 22.4 27.6 32.9 20.8 26.3 5 19.9 18.5 19.1 30.9 24.8 27.4 34.8 22.6 28.2 30.5 21.5 24.7 6 22.4 18.6 20.2 33.0 23.2 27.5 36.5 23.4 29.0 29.6 20.9 24.1 7 23.7 21.7 22.4 33.3 22.6 27.4 33.3 22.2 27.4 28.2 19.6 23.2 8 25.2 20.3 22.6 32.4 22.6 27.4 33.3 22.5 26.5 26.9 12.8 19.2 10 27.1 23.0 26.0 34.8<	DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
7 23.7 21.7 22.4 33.3 22.6 27.4 33.3 22.2 27.4 28.2 19.6 23.2 8 25.2 20.3 22.6 32.4 22.6 27.4 33.3 22.2 27.4 26.0 16.4 20.0 9 27.1 23.0 25.0 34.0 23.1 28.2 31.1 22.5 26.5 26.9 12.8 19.2 10 27.2 24.6 26.0 34.8 23.3 28.6 28.3 20.6 24.1 27.6 13.3 19.6 11 28.4 25.0 26.7 35.0 24.0 28.9 32.1 19.5 25.2 27.4 13.9 19.8 12 28.4 24.3 26.3 33.6 23.4 27.8 34.9 20.8 27.1 31.5 16.3 22.7 13 28.9 22.5 55.6 30.1 23.1 26.1 35.6 21.7 27.6 31.5 16.3 22.7 14 26.6 21.0 23.9 3	DAY	MAX		MEAN	MAX		MEAN			MEAN	MAX		
12 28.4 24.3 26.3 33.6 23.4 27.8 34.9 20.8 27.1 31.5 16.3 22.7 13 28.9 22.5 25.6 30.1 23.1 26.1 35.6 21.7 27.6 31.5 18.0 23.4 15 26.9 19.7 23.1 31.8 21.7 26.1 32.3 21.7 26.1 28.5 19.9 22.7 16 28.7 19.4 23.7 34.0 22.9 28.0 34.9 21.0 27.5 26.3 20.3 21.9 17 29.2 21.1 24.9 33.8 24.9 28.9 34.0 22.2 27.4 29.4 19.0 22.7 18 28.8 20.2 24.3 35.9 24.0 29.0 33.7 21.4 26.8 21.8 18.4 19.7 20 25.9 20.0 22.4 34.9 23.2 28.7 31.1 19.5 24.8 26.1 17.0 20.9 20 25.9 20.0 22.4 <t< td=""><td>1 2 3 4</td><td>22.9 24.3 21.3 20.9</td><td>JUNE 17.1 18.2 17.9 16.8</td><td>19.9 20.9 19.0 18.5</td><td>31.9 32.5 33.2 35.2</td><td>JULY 23.8 23.4 22.8 23.8</td><td>27.6 27.5 27.7 29.1</td><td>34.4 35.0 35.8 34.1</td><td>22.3 23.3 24.2 22.4</td><td>27.7 28.8 28.9 27.6</td><td>32.8 32.0 33.8 32.9</td><td>19.3 19.6 20.7 20.8</td><td>25.0 25.1 25.8 26.3</td></t<>	1 2 3 4	22.9 24.3 21.3 20.9	JUNE 17.1 18.2 17.9 16.8	19.9 20.9 19.0 18.5	31.9 32.5 33.2 35.2	JULY 23.8 23.4 22.8 23.8	27.6 27.5 27.7 29.1	34.4 35.0 35.8 34.1	22.3 23.3 24.2 22.4	27.7 28.8 28.9 27.6	32.8 32.0 33.8 32.9	19.3 19.6 20.7 20.8	25.0 25.1 25.8 26.3
17 29.2 21.1 24.9 33.8 24.9 28.9 34.0 22.2 27.4 29.4 19.0 22.7 18 28.8 20.2 24.3 35.9 24.0 29.0 33.7 21.4 26.8 21.8 18.4 19.7 19 28.0 20.9 23.9 34.3 24.2 28.7 31.1 19.5 24.8 26.1 17.0 20.9 20 25.9 20.0 22.4 34.9 23.2 28.5 33.6 19.2 25.3 28.3 19.2 23.1 21 27.9 19.7 23.4 34.8 23.7 28.9 31.0 19.9 24.7 27.3 19.5 23.1 21 27.9 19.7 23.4 34.8 23.7 28.9 31.0 19.9 24.7 27.3 19.5 23.1 22 29.8 19.6 24.5 33.6 23.0 27.8 29.9 20.9 24.5 29.0 19.1 23.2 23 30.1 21.0 25.2 <t< td=""><td>1 2 3 4 5 6 7 8 9</td><td>22.9 24.3 21.3 20.9 19.9 22.4 23.7 25.2 27.1</td><td>JUNE 17.1 18.2 17.9 16.8 18.5</td><td>19.9 20.9 19.0 18.5 19.1 20.2 22.4 22.6 25.0</td><td>31.9 32.5 33.2 35.2 30.9 33.0 32.4 34.0</td><td>JULY 23.8 23.4 22.8 23.8 24.8 23.2 22.6 22.6 23.1</td><td>27.6 27.5 27.7 29.1 27.4 27.5 27.6 27.4 28.2</td><td>34.4 35.0 35.8 34.1 34.8 36.5 36.2 33.3</td><td>22.3 23.3 24.2 22.4 22.6 23.4 22.8 22.2 22.5</td><td>27.7 28.8 28.9 27.6 28.2 29.0 28.7 27.4 26.5</td><td>32.8 32.0 33.8 32.9 30.5 29.6 28.2 26.0 26.9</td><td>19.3 19.6 20.7 20.8 21.5 20.9 19.6 16.4 12.8</td><td>25.0 25.1 25.8 26.3 24.7 24.1 23.2 20.0 19.2</td></t<>	1 2 3 4 5 6 7 8 9	22.9 24.3 21.3 20.9 19.9 22.4 23.7 25.2 27.1	JUNE 17.1 18.2 17.9 16.8 18.5	19.9 20.9 19.0 18.5 19.1 20.2 22.4 22.6 25.0	31.9 32.5 33.2 35.2 30.9 33.0 32.4 34.0	JULY 23.8 23.4 22.8 23.8 24.8 23.2 22.6 22.6 23.1	27.6 27.5 27.7 29.1 27.4 27.5 27.6 27.4 28.2	34.4 35.0 35.8 34.1 34.8 36.5 36.2 33.3	22.3 23.3 24.2 22.4 22.6 23.4 22.8 22.2 22.5	27.7 28.8 28.9 27.6 28.2 29.0 28.7 27.4 26.5	32.8 32.0 33.8 32.9 30.5 29.6 28.2 26.0 26.9	19.3 19.6 20.7 20.8 21.5 20.9 19.6 16.4 12.8	25.0 25.1 25.8 26.3 24.7 24.1 23.2 20.0 19.2
22 29.8 19.6 24.5 33.6 23.0 27.8 29.9 20.9 24.5 29.0 19.1 23.2 23 30.1 21.0 25.2 35.1 23.5 28.2 33.8 22.2 26.6 22.5 14.7 17.8 24 29.8 21.2 25.0 35.7 24.3 28.9 33.2 20.8 26.2 23.3 13.2 17.1 25 30.1 20.1 24.7 36.4 23.4 29.3 32.8 22.4 26.6 23.7 11.9 17.1 26 28.7 20.7 24.5 32.9 24.0 27.7 33.2 22.2 26.6 23.6 12.4 17.4 27 30.5 20.8 25.3 35.1 22.6 27.6 34.8 20.1 26.6 24.6 13.3 18.3 28 31.6 22.4 26.6 34.4 22.8 27.4 32.7 19.9 25.8 25.4 14.5 19.3 29 30.5 22.0 25.8 <t< td=""><td>1 2 3 4 5 6 7 8 9 10 11 12 13 14</td><td>22.9 24.3 21.3 20.9 19.9 22.4 23.7 25.2 27.1 27.2 28.4 28.9 26.6</td><td>JUNE 17.1 18.2 17.9 16.8 18.5 18.6 21.7 20.3 23.0 24.6 25.0 24.3 22.5 21.0</td><td>19.9 20.9 19.0 18.5 19.1 20.2 22.4 22.6 25.0 26.0 26.3 25.6 23.9</td><td>31.9 32.5 33.2 35.2 30.9 33.0 33.3 32.4 34.0 34.8 35.0 33.6 30.1 30.6</td><td>JULY 23.8 23.4 22.8 23.8 24.8 23.2 22.6 22.6 23.1 23.3 24.0 23.4 23.1 21.8</td><td>27.6 27.5 27.7 29.1 27.4 27.6 27.6 27.4 28.2 28.6 28.9 27.8 26.1 25.9</td><td>34.4 35.0 35.8 34.1 34.8 36.5 36.2 33.3 31.1 28.3 32.1 34.9</td><td>22.3 23.3 24.2 22.4 22.6 23.4 22.8 22.2 22.5 20.6 19.5 20.8 21.7 21.5</td><td>27.7 28.8 28.9 27.6 28.2 29.0 28.7 27.4 26.5 24.1 25.2 27.1 27.6 25.6</td><td>32.8 32.0 33.8 32.9 30.5 29.6 28.2 26.0 26.9 27.6 27.4 31.5 31.5</td><td>SEPTEMBE 19.3 19.6 20.7 20.8 21.5 20.9 19.6 16.4 12.8 13.3 13.9 16.3 18.0 17.2</td><td>25.0 25.1 25.8 26.3 24.7 24.1 23.2 20.0 19.2 19.6 19.8 22.7 23.4 22.7 23.2</td></t<>	1 2 3 4 5 6 7 8 9 10 11 12 13 14	22.9 24.3 21.3 20.9 19.9 22.4 23.7 25.2 27.1 27.2 28.4 28.9 26.6	JUNE 17.1 18.2 17.9 16.8 18.5 18.6 21.7 20.3 23.0 24.6 25.0 24.3 22.5 21.0	19.9 20.9 19.0 18.5 19.1 20.2 22.4 22.6 25.0 26.0 26.3 25.6 23.9	31.9 32.5 33.2 35.2 30.9 33.0 33.3 32.4 34.0 34.8 35.0 33.6 30.1 30.6	JULY 23.8 23.4 22.8 23.8 24.8 23.2 22.6 22.6 23.1 23.3 24.0 23.4 23.1 21.8	27.6 27.5 27.7 29.1 27.4 27.6 27.6 27.4 28.2 28.6 28.9 27.8 26.1 25.9	34.4 35.0 35.8 34.1 34.8 36.5 36.2 33.3 31.1 28.3 32.1 34.9	22.3 23.3 24.2 22.4 22.6 23.4 22.8 22.2 22.5 20.6 19.5 20.8 21.7 21.5	27.7 28.8 28.9 27.6 28.2 29.0 28.7 27.4 26.5 24.1 25.2 27.1 27.6 25.6	32.8 32.0 33.8 32.9 30.5 29.6 28.2 26.0 26.9 27.6 27.4 31.5 31.5	SEPTEMBE 19.3 19.6 20.7 20.8 21.5 20.9 19.6 16.4 12.8 13.3 13.9 16.3 18.0 17.2	25.0 25.1 25.8 26.3 24.7 24.1 23.2 20.0 19.2 19.6 19.8 22.7 23.4 22.7 23.2
27 30.5 20.8 25.3 35.1 22.6 27.6 34.8 20.1 26.6 24.6 13.3 18.3 28 31.6 22.4 26.6 34.4 22.8 27.4 32.7 19.9 25.8 25.4 14.5 19.3 29 30.5 22.0 25.8 36.5 24.9 29.9 30.9 20.7 24.9 25.3 14.3 19.1 30 33.3 23.4 27.8 35.3 25.1 29.4 30.9 20.5 24.5 26.4 13.5 19.3 31 33.4 23.5 28.0 31.5 20.3 25.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	22.9 24.3 21.3 20.9 19.9 22.4 23.7 227.1 27.2 28.4 28.9 26.6 26.9 28.7 29.2 28.8 82.0	JUNE 17.1 18.2 17.9 16.8 18.5 18.6 21.7 20.3 23.0 24.6 25.0 24.3 22.5 21.0 19.7 19.4 21.1 20.2 20.9	19.9 20.9 19.0 18.5 19.1 20.2 22.4 22.6 25.0 26.0 26.3 25.6 23.9 23.1 23.7 24.9 24.3 23.9	31.9 32.5 33.2 35.2 30.9 33.0 33.3 32.4 34.0 34.8 35.0 33.6 30.1 30.6 31.8 34.0 33.8	JULY 23.8 23.4 22.8 23.8 24.8 23.2 22.6 22.6 23.1 23.3 24.0 23.4 23.1 21.8 21.7 22.9 24.9 24.0 24.2	27.6 27.5 27.7 29.1 27.4 27.5 27.6 27.4 28.2 28.6 28.9 27.8 26.1 25.9 26.1 28.9 26.1 28.9 29.0 28.7	34.4 35.0 35.8 34.1 34.8 36.5 36.2 33.3 31.1 28.3 32.1 34.9 35.6 31.9 32.3	22.3 23.3 24.2 22.4 22.6 23.4 22.8 22.2 22.5 20.6 19.5 20.8 21.7 21.5 21.7 21.0 22.2 21.4 22.9	27.7 28.8 27.6 28.2 29.0 28.7 27.4 26.5 24.1 25.2 27.1 27.6 25.6 26.1 27.5 27.4 26.8	32.8 32.0 33.8 32.9 30.5 29.6 28.2 26.0 26.9 27.6 27.4 31.5 31.5 28.4 28.5 26.3 29.4 21.8	SEPTEMBE 19.3 19.6 20.7 20.8 21.5 20.9 19.6 16.4 12.8 13.3 13.9 16.3 18.0 17.2 19.9 20.3 19.0 18.4 17.0	25.0 25.1 25.8 26.3 24.7 24.1 23.2 20.0 19.2 19.6 19.8 22.7 23.4 22.3 22.7 23.2 20.7 23.4 22.7 23.2 20.0
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	22.9 24.3 21.3 20.9 19.9 22.4 23.7 27.1 27.2 28.4 28.9 26.6 26.9 28.7 29.2 28.8 30.1 27.9 29.8 30.1 29.8	JUNE 17.1 18.2 17.9 16.8 18.5 18.6 21.7 20.3 23.0 24.6 25.0 24.3 22.5 21.0 19.7 19.4 21.1 20.9 20.0 19.7 19.6 21.0 21.2	19.9 20.9 19.0 18.5 19.1 20.2 22.4 25.0 26.0 26.3 25.6 23.9 23.1 23.7 24.9 24.3 23.9 22.4 23.4 24.5 25.0	31.9 32.5 33.2 35.2 30.9 33.0 33.3 32.4 34.0 34.8 35.0 33.6 31.8 34.0 33.8 34.9 34.3 34.9	JULY 23.8 23.4 22.8 23.8 24.8 23.2 22.6 23.1 23.3 24.0 23.4 23.1 21.8 21.7 22.9 24.9 24.0 23.2 23.7 23.0 23.5 24.3	27.6 27.5 27.7 29.1 27.4 27.5 27.6 27.4 28.2 28.6 28.9 27.8 26.1 25.9 26.1 28.9 29.0 28.7 28.5	34.4 35.0 35.8 34.1 34.8 36.5 36.2 33.3 31.1 28.3 32.1 34.9 35.6 31.9 32.3 34.0 32.3 34.0 32.3	22.3 23.3 24.2 22.4 22.6 23.4 22.8 22.5 20.6 19.5 20.8 21.7 21.5 21.7 21.5 21.7 21.9 21.4 19.5 19.5	27.7 28.8 27.6 28.2 29.0 28.7 27.4 26.5 24.1 25.2 27.1 27.6 26.1 27.5 27.4 26.5 26.1 27.5 27.4 26.5 26.1	32.8 32.0 33.8 32.9 30.5 29.6 28.2 26.0 26.9 27.6 27.4 31.5 28.4 28.5 26.3 29.4 21.8 26.1 28.3	SEPTEMBE 19.3 19.6 20.7 20.8 21.5 20.9 19.6 16.4 12.8 13.3 13.9 16.3 18.0 17.2 19.9 20.3 19.0 18.4 17.0 19.2 19.5 19.1 14.7 13.2	25.0 25.1 25.8 26.3 24.7 24.1 23.2 20.0 19.2 19.6 19.8 22.7 23.4 22.3 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 22.7 23.9 23.9 22.7 23.9 22.7 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9 23.9
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	22.9 24.3 21.3 20.9 19.9 22.4 23.7 25.2 27.1 27.2 28.4 28.9 26.6 26.9 28.7 29.2 28.8 0.25.9 27.9 29.8 30.1 29.8 30.1 29.8 30.1 29.8 30.5 31.6 30.5 31.6 30.5 31.6 30.5 31.6 31.6 31.6 31.6 31.6 31.6 31.6	JUNE 17.1 18.2 17.9 16.8 18.5 18.6 21.7 20.3 23.0 24.6 25.0 24.3 22.5 21.0 19.7 19.4 21.1 20.2 20.0 19.7 19.6 21.0 21.0 21.2 20.1 20.7 20.8 22.4 22.0 23.4	19.9 20.9 19.0 18.5 19.1 20.2 22.4 22.6 25.0 26.0 26.7 26.3 25.6 23.9 23.1 23.7 24.9 24.3 23.9 22.4 23.4 24.5 25.0 26.0 26.0	31.9 32.5 33.2 35.2 30.9 33.0 33.3 32.4 34.0 34.8 35.0 33.6 31.8 34.0 33.8 35.9 34.3 34.9 34.8 35.1 35.1 36.4	JULY 23.8 23.4 22.8 23.8 24.8 23.2 22.6 22.6 23.1 23.3 24.0 23.4 23.1 21.8 21.7 22.9 24.0 24.0 23.2 23.7 23.0 23.5 24.0 23.5 24.3 23.4 24.0 22.6 22.8 24.9 25.1	27.6 27.5 27.7 29.1 27.4 27.5 27.6 27.4 28.2 28.6 28.9 27.8 26.1 25.9 26.1 28.9 29.0 28.5 29.0 28.5 29.0 29.0 28.5 27.8 28.7 28.5 29.1 28.7 28.7 28.7 28.7 28.7 28.7 29.1 29.0 29.0 29.0 29.0 29.0 29.0 29.0 29.0	34.4 35.0 35.8 34.1 34.8 36.5 36.2 33.1 28.3 32.1 34.9 35.6 31.9 32.3 34.0 33.7 31.1 33.6 31.1 33.6 31.1 33.6	AUGUST 22.3 23.3 24.2 22.4 22.6 23.4 22.8 22.2 20.6 19.5 20.8 21.7 21.0 22.2 21.4 19.9 20.9 22.2 20.8 22.4 22.2 20.1 19.9 20.9 22.2 20.8	27.7 28.8 28.9 27.6 28.2 29.0 28.7 27.4 26.5 24.1 25.6 26.1 27.5 26.6 26.1 27.5 26.6 26.6 26.6 26.6 26.6 26.6 25.8 24.5	32.8 32.0 33.8 32.9 30.5 29.6 28.2 26.0 26.9 27.6 27.4 31.5 31.5 28.4 28.5 26.3 29.4 21.8 26.1 28.3 27.3 29.0 22.5 23.3 23.7	SEPTEMBE 19.3 19.6 20.7 20.8 21.5 20.9 19.6 16.4 12.8 13.3 13.9 16.3 18.0 17.2 19.9 20.3 19.0 18.4 17.0 19.2 19.5 19.1 14.7 13.2 11.9 12.4 13.3 14.5 14.3 13.5	25.0 25.1 25.8 26.3 24.7 24.1 23.2 20.0 19.2 19.6 19.8 22.7 23.4 22.3 22.7 23.4 22.3 22.7 23.9 22.7 23.1 23.1 23.1 23.1 23.2 17.8 17.1 17.4 18.3 19.3 19.3 19.3

e Estimated

07142575 RATTLESNAKE CREEK NEAR ZENITH, KS--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		OXYC	PEN DISS	OLVED (MG	/L), WAIE	IL IEAN	OCTOBER 200	00 10 SE	CIBRIDER.	2001		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1 2	10.2 9.5 9.3	6.1 5.8 5.3 6.6 7.4	7.9	9.8	8.0 8.9 9.7 9.7 8.9	9.5	13.4 13.5 13.6 13.4 13.2	11.9	12.7 12.9 13.0 12.7 12.5	14.1 14.3 14.7	12 7	13.4 13.7
4	9.3	6.6	8.7	10.7 10.8 10.0	9.7	10.3	13.6 13.4	12.6	13.0	14.7	13.2	14.1 13.8
5											13.2	13.5
6 7	12.9 12.6	10.2 10.0	11.8 11.2 11.5 11.4 11.2	11.9 13.0 13.1 13.5 13.5	9.0 11.9	10.9 12.3 12.6	12.8 12.6 12.5 12.8	11.7 11.3	12.1 12.0 12.0 12.1 e12.8	13.4 13.5	12.1	13.3 12.8
8 9	12.8 12.9	10.2 10.3	11.5 11.4	13.1 13.5	12.2 12.0	12.7	12.5 12.8	$\begin{array}{c} 11.4 \\ 11.4 \end{array}$	12.0 12.1	13.6 13.9	12.8	13.3
10	12.6					12.7						
11 12	12.0 10.8	8.3 7.5 6.8	10.2 9.3 9.0 9.4 9.6	12.8 13.9 14.4 14.4 13.0	12.2 12.5	12.5 13.2 13.9	15.0 16.4 15.0 12.7 13.6	13.3 14.1	$14.1 \\ 15.1$	12.2 12.4 11.9 12.8 13.4	11.2 11.2 11.2	11.7 11.8
13 14	12.1 13.8	6.8 6.8	9.0 9.4	14.4 14.4	13.2 12.6	13.4	15.0 12.7	12.0	e13.5 12.4	11.9 12.8	$\frac{11.2}{11.4}$	12.2
15	14.0					12.2		12.0	12.8	13.4		12.8
16 17	12.5 11.8	7.2 7.1 7.0	9.1 9.0 8.7 8.4 8.9	13.2 14.1 14.1 13.7 13.8	11.8 12.9	12.6 13.5 13.4	14.2 15.2 14.2 14.7 14.2	12.4 13.5	13.3 14.2 13.6 14.0 13.5	13.5 13.7	12.4 12.8 13.0	13.0 13.2
18 19	11.1 10.3	7.0 7.1	8.7 8.4	14.1 13.7	12.8 12.6	13.1	14.2 14.7	13.2 13.4	13.6 14.0	13.6 13.9	13.3	13.6
20	10.9					13.3		12.9	13.5	13.8	13.1	
21 22	10.6 10.5	7.2 6.9 6.6	8.5 8.4 8.3 8.0 7.7	14.3 13.9 14.1 14.2 14.2	12.7 13.0	13.5 13.5 13.4	14.5 14.9 14.5 14.7	13.1 13.5	13.8 14.2	13.6 13.5 13.1 13.0 13.6	13.2 12.1	13.3 13.0
23 24	11.0 9.7	6.6 6.9	8.3 8.0	$14.1 \\ 14.2$	12.9 13.0	13.5	14.5 14.7	13.2 13.5	13.8 14.2	13.1 13.0	11.8 11.9	12.4 12.4
25	8.2					13.5	14.3	12.3	13.2	13.6	12.2	
26 27	7.8 8.6	6.3 6.5	7.3 7.6	14.5 14.9	12.9 13.2	13.7 14.0	13.1 13.2	11.8 12.4	12.4 12.8	12.9 13.6	$12.2 \\ 12.4$	12.4 13.1
28 29	9.1 9.7	7.9 8.5	8.5 9.1	14.1 13.9	12.5 12.4	14.0 13.3 13.1	13.8 14.0	12.2 12.6	12.9 13.3	13.3 13.1	12.9 12.5	13.2 12.9
30 31	10.6 9.1	9.1 8.2	7.3 7.6 8.5 9.1 9.7 8.7	14.5 14.9 14.1 13.9 13.6	11.8	12.7	13.1 13.2 13.8 14.0 14.5 14.3	12.9 12.8	13.8 13.6	12.7 12.8	12.1 11.6	12.4 12.2
MONTH	14.0	5.3	9.1	14.9	8.0	12.5	16.4	11.3	13.2	13.1 13.0 13.6 12.9 13.6 13.3 13.1 12.7 12.8	11.2	12.9
DAY	MAX	MTN	MEAN	MAX	MTN	MEAN	MAX	MTN	MEAN	MAX	MTN	MEAN
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2	12.6 13.1	FEBRUARY 11.8 11.9	12.2 12.6	13.3 12.3	MARCH 12.0 11.5	12.8 11.9		APRIL			MAY	9.0 9.2
1 2 3 4	12.6 13.1 12.5 12.6	FEBRUARY 11.8 11.9 11.8 11.5	12.2 12.6 12.2 12.0	13.3 12.3 11.6 11.7	MARCH 12.0 11.5 10.7 10.7	12.8 11.9 11.2 11.3		APRIL			MAY	9.0 9.2 9.3 8.2
1 2 3 4 5	12.6 13.1 12.5 12.6 12.1	FEBRUARY 11.8 11.9 11.8 11.5 10.8	12.2 12.6 12.2 12.0 11.6	13.3 12.3 11.6 11.7 12.2	MARCH 12.0 11.5 10.7 10.7 11.4	12.8 11.9 11.2 11.3 11.8	11.8 11.9 12.5 13.2 12.7	9.6 9.6 9.3 9.7 8.5	10.7 10.4 10.6 11.1 10.5	11.1 11.3 11.4 9.0 6.8	MAY 7.5 7.5 7.8 6.8 6.0	9.0 9.2 9.3 8.2 e6.3
1 2 3 4 5	12.6 13.1 12.5 12.6 12.1 11.8 11.6	FEBRUARY 11.8 11.9 11.8 11.5 10.8	12.2 12.6 12.2 12.0 11.6	13.3 12.3 11.6 11.7 12.2	MARCH 12.0 11.5 10.7 10.7 11.4 11.2 11.0	12.8 11.9 11.2 11.3 11.8	11.8 11.9 12.5 13.2 12.7	9.6 9.6 9.3 9.7 8.5	10.7 10.4 10.6 11.1 10.5	11.1 11.3 11.4 9.0 6.8	MAY 7.5 7.5 7.8 6.8 6.0	9.0 9.2 9.3 8.2 e6.3 e6.8 7.3
1 2 3 4 5 6 7 8 9	12.6 13.1 12.5 12.6 12.1 11.8 11.6 12.7 13.2	FEBRUARY 11.8 11.9 11.8 11.5 10.8	12.2 12.6 12.2 12.0 11.6	13.3 12.3 11.6 11.7 12.2	MARCH 12.0 11.5 10.7 10.7 11.4 11.2 11.0 10.6 10.2	12.8 11.9 11.2 11.3 11.8 11.5 11.4 11.1	11.8 11.9 12.5 13.2 12.7	9.6 9.6 9.3 9.7 8.5	10.7 10.4 10.6 11.1 10.5	11.1 11.3 11.4 9.0 6.8	MAY 7.5 7.5 7.8 6.8 6.0	9.0 9.2 9.3 8.2 e6.3 e6.8 7.3 7.8 7.9
1 2 3 4 5 6 7 8 9	12.6 13.1 12.5 12.6 12.1 11.8 11.6 12.7 13.2	11.8 11.9 11.8 11.5 10.8 10.4 10.4 12.4 12.3	12.2 12.6 12.2 12.0 11.6 11.3 11.1 11.2 13.0 12.8	13.3 12.3 11.6 11.7 12.2 11.9 12.0 11.7 11.5	MARCH 12.0 11.5 10.7 10.7 11.4 11.2 11.0 10.6 10.2 10.3	12.8 11.9 11.2 11.3 11.8 11.5 11.4 11.1 10.8	11.8 11.9 12.5 13.2 12.7 10.3 12.3 11.6 13.1 12.0	9.6 9.6 9.3 9.7 8.5 8.1 8.5 8.0 7.8	10.7 10.4 10.6 11.1 10.5 9.0 10.2 9.7 10.1 9.4	11.1 11.3 11.4 9.0 6.8 8.0 8.7 8.7 7.2	MAY 7.5 7.5 7.8 6.8 6.0 6.5 7.2 7.2 5.6	9.0 9.2 9.3 8.2 e6.3 e6.8 7.3 7.8 7.9 6.7
1 2 3 4 5 6 7 8 9 10	12.6 13.1 12.5 12.6 12.1 11.8 11.6 12.7 13.2 13.5	FEBRUARY 11.8 11.9 11.8 11.5 10.8 10.4 10.4 12.4 12.3 12.6 12.7	12.2 12.6 12.2 12.0 11.6 11.3 11.1 11.2 13.0 12.8	13.3 12.3 11.6 11.7 12.2 11.9 12.0 11.7 11.5 11.1	MARCH 12.0 11.5 10.7 10.7 11.4 11.2 11.0 10.6 10.2 10.3 11.0	12.8 11.9 11.2 11.3 11.8 11.5 11.4 11.1 10.8 10.7	11.8 11.9 12.5 13.2 12.7 10.3 12.3 11.6 13.1 12.0	9.6 9.6 9.3 9.7 8.5 8.1 8.5 8.0 7.8 9.0	10.7 10.4 10.6 11.1 10.5 9.0 10.2 9.7 10.1 9.4	11.1 11.3 11.4 9.0 6.8 8.0 8.7 7.2 5.9 6.8	MAY 7.5 7.5 7.8 6.8 6.0 6.5 7.2 7.2 5.6 5.4 5.8	9.0 9.2 9.3 8.2 e6.3 e6.8 7.3 7.8 6.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14	12.6 13.1 12.5 12.6 12.1 11.8 11.6 12.7 13.2 13.5	11.8 11.9 11.5 10.8 10.4 10.4 12.4 12.3 12.6 12.7 11.7	12.2 12.6 12.2 12.0 11.6 11.3 11.1 11.2 13.0 12.8	13.3 12.3 11.6 11.7 12.2 11.9 12.0 11.7 11.5 11.1	MARCH 12.0 11.5 10.7 10.7 11.4 11.2 11.0 10.6 10.2 10.3 11.0 11.0 11.0 9.6	12.8 11.9 11.2 11.3 11.8 11.5 11.4 11.1 10.8 10.7 11.7 11.8 11.0 10.3	11.8 11.9 12.5 13.2 12.7 10.3 12.3 11.6 13.1 12.0 10.3 10.3 10.6 10.5	APRIL 9.6 9.6 9.3 9.7 8.5 8.1 8.5 8.0 7.8 8.0 7.8 9.0 8.7	10.7 10.4 10.6 11.1 10.5 9.0 10.2 9.7 10.1 9.4 9.0 9.7 9.6	11.1 11.3 11.4 9.0 6.8 8.0 8.7 7.2 5.9 6.8 7.3 7.8	MAY 7.5 7.5 7.8 6.8 6.0 6.5 7.2 7.2 5.6 5.4 5.8 6.6 6.9	9.0 9.2 9.3 8.2 e6.3 e6.8 7.3 7.9 6.7 5.7 6.5 7.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	12.6 13.1 12.5 12.6 12.1 11.8 11.6 12.7 13.5 12.8 13.1 13.1 13.2 13.4	11.8 11.9 11.8 11.5 10.8 10.4 10.4 12.4 12.3 12.6 12.7 11.7 11.7	12.2 12.6 12.2 12.0 11.6 11.3 11.1 11.2 13.0 12.8 12.7 12.9 12.6 12.4 13.2	13.3 12.3 11.6 11.7 12.2 11.9 12.0 11.7 11.5 11.1 12.2 12.6 11.8 11.0 12.1	MARCH 12.0 11.5 10.7 10.7 11.4 11.2 11.0 10.6 10.2 10.3 11.0 11.0 9.6 9.6	12.8 11.9 11.2 11.3 11.8 11.5 11.4 11.1 10.8 10.7 11.7 11.8 11.0 10.3 10.9	11.8 11.9 12.5 13.2 12.7 10.3 12.3 11.6 13.1 12.0 10.3 10.6 10.5 11.0	APRIL 9.6 9.6 9.7 8.5 8.1 8.5 8.0 7.8 8.0 7.8 9.0 8.7 8.7	10.7 10.4 10.6 11.1 10.5 9.0 10.2 9.7 10.1 9.4 9.0 9.7 9.6 9.4	11.1 11.3 11.4 9.0 6.8 8.0 8.7 7.2 5.9 6.8 7.3 7.8 8.2	MAY 7.5 7.5 7.8 6.8 6.0 6.5 7.2 7.2 5.6 5.4 5.8 6.6 6.9 6.8	9.0 9.2 9.3 8.2 e6.3 e6.8 7.3 7.8 7.9 6.7 5.7 6.5 7.0 7.4 7.5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	12.6 13.1 12.5 12.6 12.1 11.8 11.6 12.7 13.2 13.5 12.8 13.1 13.1 13.1 13.2 13.4	FEBRUARY 11.8 11.9 11.5 10.8 10.4 10.4 12.4 12.3 12.6 12.7 11.7 11.7 12.9 13.1 13.2	12.2 12.6 12.2 12.0 11.6 11.3 11.1 11.2 13.0 12.8 12.7 12.9 12.6 13.2	13.3 12.3 11.6 11.7 12.2 11.9 12.0 11.7 11.5 11.1 12.2 12.6 11.8 11.0 12.1	MARCH 12.0 11.5 10.7 10.7 11.4 11.2 11.0 10.6 10.2 10.3 11.0 11.0 11.0 11.0 11.0 11.0 11.	12.8 11.9 11.2 11.3 11.8 11.5 11.4 11.1 10.8 10.7 11.7 11.8 11.0 10.3 10.9	11.8 11.9 12.5 13.2 12.7 10.3 12.3 11.6 13.1 12.0 10.3 10.3 10.6 10.5 11.0	APRIL 9.6 9.6 9.3 9.7 8.5 8.1 8.5 8.0 7.8 8.0 7.8 9.0 8.7 8.7 8.7 9.6	10.7 10.4 10.6 11.1 10.5 9.0 10.2 9.7 10.1 9.4 9.0 9.7 9.6 9.8	11.1 11.3 11.4 9.0 6.8 8.0 8.7 7.2 5.9 6.8 7.3 7.8 8.2	MAY 7.5 7.5 7.8 6.8 6.0 6.5 7.2 5.6 5.4 6.6 6.9 6.8 6.5 6.6	9.0 9.2 9.3 8.2 e6.3 e6.8 7.3 7.8 6.7 5.7 6.5 7.0 7.4 7.5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	12.6 13.1 12.5 12.6 12.1 11.8 11.6 11.6 13.2 13.5 12.8 13.1 13.1 13.2 13.4 13.7 13.7	11.8 11.9 11.5 10.8 10.4 10.4 12.4 12.3 12.6 12.7 11.7 11.7 11.7 12.9	12.2 12.6 12.2 12.0 11.6 11.3 11.1 11.2 13.0 12.8 12.7 12.9 12.4 13.2 13.4 13.5 13.3 12.3	13.3 12.3 11.6 11.7 12.2 11.9 12.0 11.7 11.5 11.1 12.2 12.6 11.8 11.0 12.1	MARCH 12.0 11.5 10.7 10.7 11.4 11.2 11.0 10.6 10.2 10.3 11.0 11.0 11.0 11.0 11.0 10.2 9.6 9.6	12.8 11.9 11.2 11.3 11.8 11.5 11.4 11.1 10.8 10.7 11.7 11.8 11.0 10.3 10.9	11.8 11.9 12.5 13.2 12.7 10.3 12.3 11.6 13.1 12.0 10.3 10.3 10.6 10.5 11.0	APRIL 9.6 9.6 9.3 9.7 8.5 8.1 8.5 8.0 7.8 8.0 7.8 8.7 8.7 8.7 8.7 9.6 9.2 8.5	10.7 10.4 10.6 11.1 10.5 9.0 10.2 9.7 10.1 9.4 9.0 9.7 9.8 10.0 10.7	11.1 11.3 11.4 9.0 6.8 8.0 8.7 7.2 5.9 6.8 7.3 7.8 8.2 7.7 8.4	MAY 7.5 7.5 7.8 6.8 6.0 6.5 7.2 7.2 5.6 5.4 5.8 6.9 6.8 6.5 6.6 7.6	9.0 9.2 9.3 8.2 e6.3 e6.8 7.3 7.9 6.7 5.7 6.5 7.0 7.4 7.5 7.2 7.5 8.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	12.6 13.1 12.5 12.6 12.1 11.8 11.6 12.7 13.2 13.5 12.8 13.1 13.1 13.2 13.4 13.7 13.6 12.9 12.1	FEBRUARY 11.8 11.9 11.8 11.5 10.8 10.4 10.4 12.4 12.3 12.6 12.7 11.7 11.7 11.7 12.9 13.1 13.2 12.9 11.4 11.5	12.2 12.6 12.2 12.0 11.6 11.3 11.1 11.2 13.0 12.8 12.7 12.9 12.6 12.4 13.4 13.5 13.3 11.8	13.3 12.3 11.6 11.7 12.2 11.9 12.0 11.7 11.5 11.1 12.2 12.6 11.8 11.0 12.1 13.0 11.9 11.9 11.9	MARCH 12.0 11.5 10.7 10.7 11.4 11.2 11.0 10.6 10.2 10.3 11.0 11.0 11.0 10.2 9.6 9.6 11.3 10.8 10.9 11.0 10.1	12.8 11.9 11.2 11.3 11.8 11.5 11.4 11.1 10.8 10.7 11.7 11.8 11.0 10.3 10.9	11.8 11.9 12.5 13.2 12.7 10.3 12.3 11.6 13.1 12.0 10.3 10.6 10.5 11.0 11.3 11.6 11.0	APRIL 9.6 9.6 9.3 9.7 8.5 8.1 8.5 8.0 7.8 8.0 7.8 8.7 9.0 8.7 8.7 9.6 9.2 8.5 7.9	10.7 10.4 10.6 11.1 10.5 9.0 10.2 9.7 10.1 9.4 9.0 9.7 9.6 9.4 9.8	11.1 11.3 11.4 9.0 6.8 8.0 8.7 7.2 5.9 6.8 7.3 7.8 8.2 7.7 8.4 9.4 10.5	MAY 7.5 7.5 7.8 6.8 6.0 6.5 7.2 7.2 5.6 5.4 6.6 6.9 6.5 7.6 7.6	9.0 9.2 9.3 8.2 e6.3 e6.8 7.3 7.8 7.5 7.0 7.4 7.5 7.2 7.5 8.4 8.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	12.6 13.1 12.5 12.6 12.1 11.8 11.6 12.7 13.2 13.5 12.8 13.1 13.1 13.2 13.4 13.7 13.6 12.7	FEBRUARY 11.8 11.9 11.5 10.8 10.4 10.4 12.4 12.3 12.6 12.7 11.7 11.7 12.9 13.1 13.2 12.9 11.4 11.5	12.2 12.6 12.2 12.0 11.6 11.3 11.1 11.2 13.0 12.8 12.7 12.9 12.4 13.5 13.3 11.8 12.7	13.3 12.3 11.6 11.7 12.2 11.9 12.0 11.7 11.5 11.1 12.2 12.6 11.8 11.0 12.1 13.0 11.9 11.9 11.9	MARCH 12.0 11.5 10.7 10.7 11.4 11.2 11.0 10.6 10.2 10.3 11.0 11.0 11.0 11.0 11.0 10.2 9.6 9.6 11.3 10.8 10.9 11.0 10.1	12.8 11.9 11.2 11.3 11.8 11.5 11.4 11.1 10.8 10.7 11.7 11.8 11.0 10.3 10.9 12.2 11.4 11.5 10.9	11.8 11.9 12.5 13.2 12.7 10.3 12.3 11.6 13.1 12.0 10.3 10.5 11.0 11.3 11.6 11.0 10.8 10.4	APRIL 9.6 9.3 9.7 8.5 8.1 8.5 8.0 7.8 9.0 8.7 8.7 8.7 9.6 9.2 8.5 7.7	10.7 10.4 10.6 11.1 10.5 9.0 10.2 9.7 10.1 9.4 9.0 9.7 9.8 10.0 10.7 10.2 9.8	11.1 11.3 11.4 9.0 6.8 8.0 8.7 7.2 5.9 6.8 7.3 7.8 8.2 7.7 8.4 9.4 10.5 10.7	MAY 7.5 7.5 6.8 6.0 6.5 7.2 5.6 5.4 6.6 6.9 6.8 6.5 6.6 7.6 7.6 7.6	9.0 9.2 9.3 8.2 e6.3 e6.8 7.9 6.7 5.7 6.5 7.0 7.4 7.5 8.4 8.8 9.3 8.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	12.6 13.1 12.5 12.6 12.1 11.8 11.6 12.7 13.2 13.5 12.8 13.1 13.2 13.4 13.7 13.7 13.7 13.6 12.9 12.1	FEBRUARY 11.8 11.9 11.5 10.8 10.4 10.4 12.4 12.3 12.6 12.7 11.7 11.7 11.7 11.9 11.1 13.2 12.9 11.4 11.5	12.2 12.6 12.2 12.0 11.6 11.3 11.1 11.2 13.0 12.8 12.7 12.9 12.6 12.4 13.2 13.3 11.8 12.7 12.7 11.8	13.3 12.3 11.6 11.7 12.2 11.9 12.0 11.7 11.5 11.1 12.2 12.6 11.8 11.0 12.1 13.0 11.9 11.9 11.9 11.9 11.9	MARCH 12.0 11.5 10.7 10.7 11.4 11.2 11.0 10.6 10.2 10.3 11.0 11.0 11.0 11.0 10.2 9.6 9.6 11.3 10.8 10.9 11.0 10.1	12.8 11.9 11.2 11.3 11.8 11.5 11.4 11.1 10.8 10.7 11.7 11.8 11.0 10.3 10.9 12.2 11.4 11.5 10.9	11.8 11.9 12.5 13.2 12.7 10.3 12.3 11.6 13.1 12.0 10.3 10.6 10.5 11.0 11.3 11.6 11.0 10.8 10.4	APRIL 9.6 9.6 9.3 9.7 8.5 8.1 8.5 8.0 7.8 8.0 7.8 8.7 8.7 8.7 9.6 9.2 8.5 7.9 7.7 9.0 8.7	10.7 10.4 10.6 11.1 10.5 9.0 10.2 9.7 10.1 9.4 9.0 9.7 9.6 9.4 9.8 10.0 10.7 10.7 10.2 9.8	11.1 11.3 11.4 9.0 6.8 8.0 8.7 7.2 5.9 6.8 7.3 7.8 8.2 7.7 8.4 9.4 10.5 10.7	MAY 7.5 7.58 6.8 6.0 6.52 7.2 5.6 5.4 5.8 6.9 6.8 6.5 6.6 7.6 7.6 7.7 7.6	9.0 9.2 9.3 8.2 e6.3 e6.8 7.3 7.9 6.7 5.7 6.5 7.0 7.4 7.5 8.8 8.8 8.8 9.3 8.9 9.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	12.6 13.1 12.6 12.1 11.8 11.6 12.7 13.2 13.5 12.8 13.1 13.1 13.2 13.4 13.7 13.6 12.9 12.1 13.3 13.4 13.7	FEBRUARY 11.8 11.9 11.8 11.5 10.8 10.4 10.4 12.4 12.3 12.6 12.7 11.7 11.7 12.9 13.1 13.2 12.9 11.4 11.5 11.9 11.7 11.6 10.5 10.6	12.2 12.6 12.2 12.0 11.6 11.3 11.1 11.2 13.0 12.8 12.7 12.9 12.6 12.4 13.2 13.4 13.5 13.3 11.3 12.3 11.8 12.7 12.7 11.8 11.2	13.3 12.3 11.6 11.7 12.2 11.9 12.0 11.7 11.5 11.1 12.2 12.6 11.8 11.0 12.1 13.0 11.9 11.9 11.9 11.8 11.5	MARCH 12.0 11.5 10.7 10.7 11.4 11.2 11.0 10.6 10.2 10.3 11.0 11.0 11.0 10.2 9.6 9.6 11.3 10.8 10.9 11.0 10.1	12.8 11.9 11.2 11.3 11.8 11.5 11.4 11.1 10.7 11.7 11.8 11.0 10.3 10.9 12.2 11.4 11.5 10.9	11.8 11.9 12.5 13.2 12.7 10.3 12.3 11.6 13.1 12.0 10.3 10.5 11.0 11.3 11.6 11.0 10.8 10.4	APRIL 9.6 9.3 9.7 8.5 8.1 8.5 8.0 7.8 8.0 7.8 9.0 8.7 8.7 9.6 9.2 8.5 7.9 7.7 7.7 7.7 9.0 8.7 8.0	10.7 10.4 10.6 11.1 10.5 9.0 10.2 9.7 10.1 9.4 9.0 9.7 9.6 9.4 9.8 10.0 10.7 10.2 9.8 9.2 8.9 8.4 10.1	11.1 11.3 11.4 9.0 6.8 8.0 8.7 7.2 5.9 6.8 7.3 7.8 8.2 7.7 8.4 9.4 10.5 10.7	MAY 7.5 7.58 6.8 6.0 6.5 7.22 5.6 5.4 6.6 6.8 6.6 7.6 7.6 7.6 7.7	9.0 9.2 9.3 8.2 e6.3 e6.8 7.3 7.9 6.7 5.7 6.5 7.0 7.4 7.5 8.4 8.8 8.8 8.8 9.3 8.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 25 26 27	12.6 13.1 12.5 12.6 12.1 11.8 11.6 12.7 13.2 13.5 12.8 13.1 13.1 13.2 13.4 13.7 13.7 13.6 12.1 13.1 13.1 13.2 13.4 13.1 13.1 13.2 13.4	FEBRUARY 11.8 11.9 11.5 10.8 10.4 10.4 12.4 12.3 12.6 12.7 11.7 11.7 12.9 13.1 13.2 12.9 11.1 13.2 11.9 11.6 10.5 10.6	12.2 12.6 12.2 12.0 11.6 11.3 11.1 11.2 13.0 12.8 12.7 12.9 12.4 13.2 13.4 13.5 13.3 11.8 12.7 11.8 11.1	13.3 12.3 11.6 11.7 12.2 11.9 12.0 11.5 11.1 12.2 12.6 11.8 11.0 12.1 13.0 11.9 11.9 11.9 11.9 11.9 11.9	MARCH 12.0 11.5 10.7 10.7 11.4 11.2 11.0 10.6 10.2 10.3 11.0 11.0 11.0 9.6 9.6 11.3 10.8 10.9 11.0 10.1 9.6 9.6 11.3 11.0 11.1 11.0 11.1	12.8 11.9 11.2 11.3 11.8 11.5 11.4 11.1 10.8 10.7 11.7 11.7 11.8 11.0 10.3 10.9 12.2 11.4 11.5 10.9	11.8 11.9 12.5 13.2 12.7 10.3 12.3 11.6 13.1 12.0 10.3 10.5 11.0 11.3 11.6 11.0 10.8 10.4	APRIL 9.6 9.6 9.3 9.7 8.5 8.1 8.5 8.0 7.8 9.0 8.7 8.7 9.6 9.2 8.5 7.9 7.7 9.0 8.7 8.0 8.0 8.0	10.7 10.4 10.6 11.1 10.5 9.0 10.2 9.7 10.1 9.4 9.0 9.7 9.8 10.0 10.7 10.2 9.8 10.0 10.7 10.2 9.8	11.1 11.3 11.4 9.0 6.8 8.0 8.7 7.2 5.9 6.8 7.3 7.8 8.2 7.7 8.4 9.4 10.5 10.7	MAY 7.5 7.58 6.8 6.0 6.5 7.22 5.6 5.4 5.8 6.9 6.7 7.6 7.6 7.6 7.7 7.1 6.7	9.0 9.2 9.3 8.2 e6.3 e6.8 7.3 7.9 6.7 5.7 6.5 7.0 7.4 7.5 8.4 8.8 9.3 8.9 9.4 9.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	12.6 13.1 12.5 12.6 12.1 11.8 11.6 12.7 13.2 13.5 12.8 13.1 13.2 13.4 13.7 13.7 13.6 12.9 12.1 13.3 13.4 12.1 11.8 11.8	11.8 11.9 11.8 11.5 10.8 10.4 10.4 12.4 12.3 12.6 12.7 11.7 11.7 11.7 11.7 11.9 11.1 13.2 12.9 11.4 11.5	12.2 12.6 12.2 12.0 11.6 11.3 11.1 11.2 13.0 12.8 12.7 12.9 12.6 12.4 13.2 13.4 13.5 13.3 11.8 12.7 11.8 12.7 11.8	13.3 12.3 11.6 11.7 12.2 11.9 12.0 11.7 11.5 11.1 12.2 12.6 11.8 11.0 12.1 13.0 11.9 11.8 11.5 11.1 11.4 12.2 13.0 13.7 14.1 13.4 12.8	MARCH 12.0 11.5 10.7 10.7 11.4 11.2 11.0 10.6 10.2 10.3 11.0 11.0 11.0 11.0 11.0 11.0 11.0	12.8 11.9 11.2 11.3 11.8 11.5 11.4 11.1 10.8 10.7 11.7 11.8 11.0 10.3 10.9 12.2 11.4 11.5 10.9 10.4 11.5 11.5 11.5 11.5 11.5 11.5 11.6 11.5 11.6 11.6	11.8 11.9 12.5 13.2 12.7 10.3 12.3 11.6 13.1 12.0 10.3 10.5 11.0 11.3 11.6 11.0 10.5 11.0 10.9 10.9	APRIL 9.6 9.6 9.3 9.7 8.5 8.1 8.5 8.0 7.8 8.7 8.7 8.7 9.6 9.2 8.5 7.9 7.7 7.7 9.0 8.7 8.0 8.0 8.0 8.0 8.0	10.7 10.4 10.6 11.1 10.5 9.0 10.2 9.7 10.1 9.4 9.0 9.7 9.6 9.4 9.8 10.0 10.7 10.2 9.8 9.2 8.9 8.4 10.9 9.6	11.1 11.3 11.4 9.0 6.8 8.0 8.7 8.7 7.2 5.9 6.8 7.3 7.8 8.2 7.7 8.4 10.5 10.7	MAY 7.5 7.8 6.8 6.0 6.5 7.2 5.6 5.4 5.8 6.9 6.8 6.5 6.6 7.6 7.7 7.1 6.7 6.3	9.0 9.2 8.2 e6.3 e6.8 7.3 7.9 6.7 5.7 6.5 7.0 7.4 7.5 8.8 8.8 8.9 9.3 9.9 9.1 9.1 9.3 9.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	12.6 13.1 12.5 12.6 12.1 11.8 11.6 12.7 13.2 13.5 12.8 13.1 13.1 13.1 13.7 13.7 13.6 12.1 13.3 13.4 11.8 11.8 11.8	FEBRUARY 11.8 11.9 11.5 10.8 10.4 10.4 12.4 12.3 12.6 12.7 11.7 11.7 12.9 13.1 13.2 12.9 11.4 11.5 11.9 11.7 11.6 10.5 10.6	12.2 12.6 12.2 12.0 11.6 11.3 11.1 11.2 13.0 12.8 12.7 12.9 12.6 13.5 13.3 11.8 12.7 11.8 11.2 11.1 11.0 12.7 11.8	13.3 12.3 11.6 11.7 12.2 11.9 12.0 11.7 11.5 11.1 12.2 12.6 11.8 11.0 12.1 13.0 11.9 11.9 11.9 11.9 11.5 11.1 11.5 11.1 11.5 11.5	MARCH 12.0 11.5 10.7 10.7 11.4 11.2 11.0 10.6 10.2 10.3 11.0 11.0 11.0 10.2 9.6 9.6 11.3 10.8 10.9 11.0 10.1 9.6 9.6 11.3 11.0 11.0 11.0 11.0 11.0 11.0 11.0	12.8 11.9 11.2 11.3 11.8 11.5 11.4 11.1 10.8 10.7 11.7 11.8 11.0 10.3 10.9 12.2 11.4 11.5 10.9 10.4 10.7 11.7 12.3 12.6 12.4 11.8	11.8 11.9 12.5 13.2 12.7 10.3 12.3 11.6 13.1 12.0 10.3 10.5 11.0 11.3 11.6 11.0 10.8 10.4 10.3 9.2 11.1 11.0 10.9 10.9	APRIL 9.6 9.3 9.7 8.5 8.1 8.5 8.0 7.8 8.0 7.8 8.7 8.7 8.7 9.6 9.2 8.5 7.7 7.7 7.7 7.7 8.0 8.0 8.0 8.0	10.7 10.4 10.6 11.1 10.5 9.0 10.2 9.7 10.1 9.4 9.0 9.7 9.6 9.4 9.8 10.0 10.7 10.2 9.8 9.2 9.3	11.1 11.3 11.4 9.0 6.8 8.0 8.7 7.2 5.9 6.8 7.3 7.8 8.2 7.7 8.4 9.4 10.5 10.7	MAY 7.5 7.58 6.8 6.0 6.5 7.22 5.6 5.48 6.69 6.8 6.66 7.66 7.67 7.1 7.1 7.1 7.7 7.1 7.7	9.0 9.2 9.3 8.2 e6.3 e6.8 7.3 7.9 6.7 5.7 6.5 7.0 7.5 8.4 8.8 8.8 9.3 9.4 9.8 9.9

07142575 RATTLESNAKE CREEK NEAR ZENITH, KS--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBE	R
1 2 3 4 5	8.7 9.2 6.9 5.7 5.9	6.6 6.5 5.4 5.2 5.4	7.5 7.7 6.3 5.5 5.7	13.6 13.2 12.3 12.0 12.3	6.1 6.3 6.2 5.6 5.5	9.6 9.4 9.1 8.7 8.8	9.5 9.4 9.5 9.4 9.6	5.0 4.8 4.8 5.5	7.1 6.9 6.9 7.5 7.4	11.0 10.5 10.6 11.3	5.1 5.2 4.9 4.9	7.6 7.5 7.3 7.5 7.1
6 7 8 9 10	6.1 6.0 6.5 	5.7 5.7 	6.0 5.9 e5.4 	12.1 11.7 11.6 10.7 10.6	6.3 6.0 5.9 5.7 5.6	9.0 8.7 8.6 8.3 8.0	9.9 10.3 10.3 10.6 10.9	5.5 5.5 5.7 6.2	7.5 7.7 7.8 7.8 8.5	9.7 10.4 10.0 11.0 10.5	5.4 5.6 5.9 6.1 6.2	7.2 7.3 7.8 8.5 8.1
11 12 13 14 15	7.1 8.5 10.3 12.4	5.3 6.0 6.5 7.1	e5.4 6.1 7.2 8.2 9.2	10.1 10.9 11.0 10.8 11.4	5.5 5.5 5.8 6.2 6.0	7.8 8.0 8.1 8.2 8.2	11.1 10.7 10.9 10.6 10.3	5.8 5.7 5.5 5.5	8.4 8.1 8.1 8.0 7.9	10.0 11.4 11.4 10.5 10.5	5.9 4.9 4.9 4.1 4.6	7.9 7.8 7.4 7.1 6.7
16 17 18 19 20	13.2 14.5 14.6 15.1 14.9	7.2 6.9 7.0 6.9 7.1	9.6 10.2 10.2 10.3 10.1	14.7 12.5 10.5 9.3 9.0	5.0 4.8 5.2 5.2 5.3	9.3 8.0 7.4 7.2 7.1	10.7 10.7 10.1 9.9 9.5	5.0 5.0 5.1 5.1 4.9	7.5 7.5 7.3 7.3	11.1 9.2 	4.7 3.9 	6.7 5.9
21 22 23 24 25	16.7 16.9 15.1 13.9 13.7	7.3 7.0 6.7 6.5 6.8	11.4 11.4 10.5 9.8 9.7	8.6 8.7 8.3 8.5	5.2 5.2 5.2 4.7 4.6	6.9 6.9 6.5 6.5	8.6 8.3 8.1 9.5 9.5	4.7 4.9 4.2 4.0 4.7	6.6 6.2 5.8 6.5 6.7	7.8 9.1 9.6	6.4 6.5 7.7	7.0 8.1 8.7 e8.6
26 27 28 29 30 31	14.0 14.1 14.4 14.1 14.2	6.7 6.7 6.4 6.4 6.2	10.1 10.0 9.9 10.0 9.7	9.4 9.0 11.9 11.3 10.5	4.6 5.2 4.5 4.4 4.6 5.1	6.7 6.8 7.5 7.0 7.1 7.2	10.5 10.3 10.4 9.7 10.0 10.8	4.8 4.9 4.9 5.2 5.3	7.0 7.1 7.3 7.1 7.1 7.3	9.6 9.7 10.1 10.6 11.6	7.5 7.0 6.9 6.7	8.5 8.4 8.3 8.4 8.7
MONTH	16.9	5.2	8.5	14.7	4.4	7.8	11.1	4.0	7.3	11.6	3.9	7.7

e Estimated

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 20

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBE	₹.		NOVEMBER		:	DECEMBER			JANUAR	Y
1 2 3 4 5	18 26 33 16 15	5.4 6.3 6.3 5.0 5.9	11 12 15 8.0 8.9	360 200 110 71 57	200 110 57 38 39	290 140 76 54 46	12 14 13 15	8.7 9.2 11 9.9	e12 11 11 12 11	44 51 52 78 78	38 35 39 42 45	41 42 46 52 58
6 7 8 9 10	12 26 17 22 19	5.9 8.9 9.1 9.1 8.9	7.9 12 11 12 13	59 33 27 29 27	29 22 19 19 17	42 28 23 22 21	16 14 11 15	9.7 9.2 8.3 9.0 9.7	12 11 9.6 12 e12	110 67	69 46	86 53
11 12 13 14 15	18 24 29 62 40	10 11 14 16 22	14 17 20 27 26	23 28 	17 18 18 21	20 e23 e24 e27 e26	21 22 19 20 18	14 18 15 15	16 19 17 17 16	67 	40 	52
16 17 18 19 20	48 42 43 38 32	22 22 23 20 18	29 29 30 28 24	26 21 22 25 19	18 15 15 14	23 18 17 17 15	18 19 20 20 21	14 15 13 16 15	16 17 16 18	 39 17	 10 6.5	 20 10
21 22 23 24 25	37 53 74 150 250	20 30 34 45 140	28 39 51 110 200	18 15 14 17 14	12 10 10 11	14 12 12 13 12	23 26 26 37 18	17 16 15 17 14	20 19 18 27 16	70 73 51 64 61	13 12 31 39 39	35 34 38 50 48
26 27 28 29 30 31	210 140 130 190 92 310	130 110 87 83 69 92	170 120 110 120 78 230	22 16 	11 7.9 8.5 	15 11 12 e12 e11	19 25 32 38 40 44	14 18 21 30 35 35	16 23 26 33 37 39	54 58 54 120 97 120	37 34 26 48 69 59	45 44 37 81 80 92
MONTH	310	5.0	52	360	7.9	36	44	8.3	18	120	6.5	50

07142575 RATTLESNAKE CREEK NEAR ZENITH, KS--Continued

e Estimated

07142680 ARKANSAS RIVER NEAR NICKERSON, KS

LOCATION.--Lat $38^{\circ}08^{\circ}42^{\circ}$, long $98^{\circ}06^{\circ}39^{\circ}$, in SE $^{1}/_{4}$ SW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.8, T.22 S., R.7 W., Reno County, Hydrologic Unit 11030010, on left bank at upstream side of state highway bridge, 1.5 mi west of Nickerson, and at mile 825.8.

DRAINAGE AREA.--36,015 mi^2 , of which 6,571 mi^2 is probably noncontributing.

PERIOD OF RECORD. -- July 1997 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,581.63 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow slightly regulated since 1948 by John Martin Reservoir (station 07130000). Extensive diversions upstream from station for irrigation. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

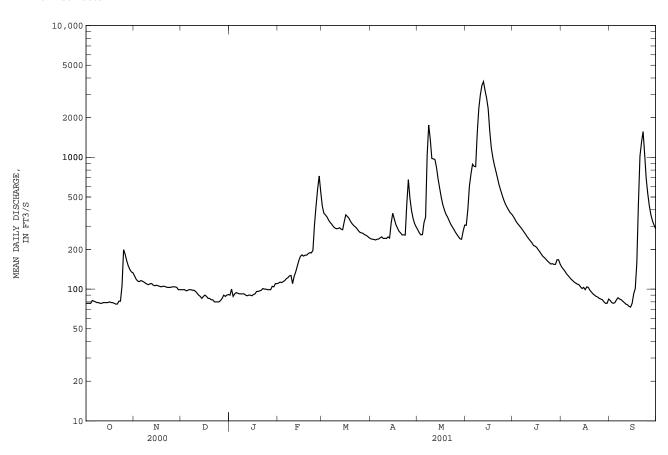
Date	Tin	ie	Discharge (ft ³ /s)	Gag	e height (ft)		Date	Time	e	Discharge (ft ³ /s)		height (ft)
May 8 Jun 12	090 080		1,830 *3,870		13.27 15.50		Sep 22	154	5	1,630	1	3.03
		DISCHA	ARGE, CUBIC	FEET PE		WATER YE Y MEAN VA		R 2000 TO	SEPTEMBI	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	78 78 78 78 82	126 119 115 114 116	99 99 99 97 98	90 100 88 92 94	111 113 112 114 116	426 377 365 353 334	241 239 238 236 239	282 267 258 259 320	305 400 604 746 886	357 341 324 312 302	147 142 137 131 127	82 79 78 79 83
6 7 8 9 10	81 80 79 79 78	115 113 111 109 108	99 99 98 98	93 92 92 92 92	120 122 126 127 110	321 311 299 291 287	240 245 249 242 243	352 1030 1760 1370 979	854 849 1510 2340 2980	292 281 270 260 249	123 119 116 113 111	86 84 83 81 79
11 12 13 14 15	78 79 79 79 79	110 110 107 106 107	e93 e90 88 e85 e88	90 89 90 90 89	125 135 149 165 177	288 292 285 282 324	242 249 244 316 376	974 960 835 684 583	3510 3760 3220 2810 2340	240 232 224 214 212	109 108 104 101 103	77 76 74 73 78
16 17 18 19 20	80 79 79 78 77	106 105 104 105 105	e90 e88 e85 e85 e83	91 92 96 96 e97	182 178 181 181 186	366 356 345 327 314	341 309 291 275 267	498 437 400 370 353	1590 1180 992 870 778	207 199 192 184 177	99 104 103 98 95	92 101 158 438 1020
21 22 23 24 25	77 81 81 106 199	104 103 103 103 104	e83 e80 e80 e80	98 101 100 100 99	189 188 197 307 427	304 297 289 278 270	258 258 257 444 676	332 312 298 285 271	693 616 562 514 474	173 168 163 159 155	92 90 88 87 85	1300 1570 1060 689 529
26 27 28 29 30 31	184 164 150 141 135 133	104 104 103 99 99	e82 e85 e90 e88 e90	99 99 105 104 110	573 722 546 	267 265 259 256 251 245	491 396 344 314 296	260 250 241 239 275 306	442 419 399 381 371	156 154 154 167 167 155	84 83 80 78 78 84	427 366 330 306 287
MEAN MAX MIN AC-FT	97.7 199 77 6010	108 126 99 6420	89.9 99 80 5530	95.8 110 88 5890	214 722 110 11860	307 426 245 18890	302 676 236 17960	517 1760 239 31820	1246 3760 305 74170	221 357 154 13570	104 147 78 6380	329 1570 73 19570

07142680 ARKANSAS RIVER NEAR NICKERSON, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	210 299 1998 97.7 2001	284 412 1998 108 2001	241 378 1998 89.9 2001	296 604 1998 95.8 2001	444 892 1998 214 2001	617 977 1998 307 2001	759 1414 1998 302 2001	686 957 1999 517 2001	957 1935 1999 289 2000	588 1455 1999 221 2001	397 895 1999 104 2001	247 372 1999 93.5 2000
SUMMARY	STATIST	ICS	FOR 2	2000 CALE	NDAR YEAR	FC	OR 2001 W.	ATER YEAR		WATER YE	ARS 1998	- 2001
	MEAN 'ANNUAL I ANNUAL MI			321			301			477 682 301		1999 2001
	DAILY M			2180	Mar 26		3760	Jun 12		3760	Jun 1	2 2001
LOWEST	DAILY ME	AN		77	Oct 20		73	Sep 14		73	Sep 1	4 2001
ANNUAL	SEVEN-DA	Y MINIMUM		78	Oct 15		77	Sep 9		77	Sep	9 2001
MAXIMUM	I PEAK FLO	WC					3870	Jun 12		3870		2 2001
							15.5			15.50		2 2001
	MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW						56	Dec 13		56	Dec 1	3 2000
	RUNOFF (- ,		233200			218100			345200		
	ENT EXCE			624			577			1040		
	ENT EXCE			226			154			324		
90 PERC	ENT EXCE	EDS		85			81			104		

e Estimated



07143300 COW CREEK NEAR LYONS, KS

LOCATION.--Lat $38^{\circ}18^{\circ}30^{\circ}$, long $98^{\circ}11^{\circ}30^{\circ}$, in SW $^{1}/_{4}$ NW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.15, T.20 S., R.8 W., Rice County, Hydrologic Unit 11030011, on left bank near downstream side of Missouri Pacific Railroad bridge, 500 ft downstream from Little Cow Creek, 3.0 mi south of Lyons, and at mile 33.0.

DRAINAGE AREA.--728 mi², includes 229 mi² in Cheyenne Bottoms, closed basin.

PERIOD OF RECORD.--October 1937 to September 1951. Occasional low-flow measurements, water years 1954-60. Annual maximum, water years 1960-61. October 1961 to current year. Prior to April 1938, monthly discharge only, published in WSP 1311.

REVISED RECORDS.--WSP 877: 1938(M). WSP 1117: Drainage area. WSP 1177: 1950(M).

GAGE.--Water-stage recorder. Datum of gage is 1,628.16 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to July 3, 1938, non-recording gage at present site and datum. July 3, 1938, to Sept. 30, 1951, water-stage recorder at site 60 ft upstream at same datum. October 1959, to Mar. 12, 1962, crest-stage gage at present site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by releases from Cheyenne Bottoms, which in turn is affected by diversions from Arkansas River and Walnut Creek, and by periodic discharges from salt plant immediately upstream. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1928, 22.75 ft July 11, 1929, from information by Missouri Pacific Railroad Co.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ${\rm ft}^3/{\rm s}$ and maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)		Date	Time	Discharge (ft ³ /s)	Gage heig (ft)	ht
	Feb 25 Jun 11	0400 0600	2,710 1,700	17.84 16.99		Jun 21 Sep 18	1000 1500	2,220 *3,290	17.40 *18.16	
MEAN DAILY DISCHARGE, IN FT3/S	10,000 5000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000		N D	J F	M	A	M	J	A	s
		2	000				2001			

07143300 COW CREEK NEAR LYONS, KS--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES

					DAILY	MEAN VA	LUES					
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	2.5 2.1 2.2 2.4 2.9	17 11 9.7 9.6 7.3	6.7 6.8 7.1 7.3 7.5	e7.0 e8.0 e9.0 e10 e11	12 13 9.9 9.8 11	161 127 146 161 149	22 21 21 21 22	39 38 37 40 88	1020 1110 526 204 408	75 70 69 66 63	20 15 12 11 9.0	28 18 12 9.6 7.2
6 7 8 9 10	3.3 3.0 3.2 3.6 3.5	6.2 6.1 6.3 6.7	8.0 8.4 8.1 8.0 7.8	e12 e13 14 13	11 11 12 21 15	95 63 49 40 36	22 24 28 25 22	399 580 363 153 92	743 307 835 1660 1670	59 56 54 50 46	8.2 8.0 7.5 6.6 6.3	5.8 5.2 5.2 4.8 4.6
11 12 13 14 15	3.1 3.4 3.6 3.6 3.5	7.0 7.9 7.8 7.5 7.4	e7.0 e6.0 e6.0 e5.0 e6.0	11 11 10 10 e9.0	14 14 14 e14 e14	35 39 39 34 168	20 74 215 117 51	71 62 56 55 54	1590 615 227 174 152	44 41 38 31 25	5.9 5.8 5.7 5.6 5.7	4.1 4.0 3.8 3.6 5.2
16 17 18 19 20	3.9 4.1 3.5 4.1 4.4	7.1 7.0 7.0 7.1 6.9	e6.0 e5.0 e5.0 e5.0 e5.0	e9.0 8.5 e8.3 e8.0 e8.0	e13 e13 12 12 14	688 418 153 70 53	35 31 27 25 24	52 51 50 49 45	140 137 184 180 742	21 19 17 15 14	5.8 6.1 6.7 6.2 5.9	5.9 24 2270 2440 1710
21 22 23 24 25	4.9 5.8 5.8 20 132		e4.0 e4.0 e5.0 e5.0 e4.0	8.0 7.9 7.9 8.2 e8.0	25 36 44 1440 2380	44 37 33 30 28	25 24 22 22 58	40 30 27 38 37	1890 1010 303 154 120	13 11 10 9.9 9.6	5.8 5.2 4.5 4.5	704 124 53 36 27
26 27 28 29 30 31	471 133 35 25 50 32	7.2 7.4 7.4 7.5 7.7	e5.0 e6.0 e7.0 e6.0 e5.0 e6.0	8.3 9.5 15 12 11	1780 1230 328 	27 26 25 25 24 23	48 43 44 45 41	39 39 36 40 205 572	104 93 86 82 79	11 13 79 508 96 32	346 47 21 14 12 9.6	22 19 17 16 15
MEAN MAX MIN AC-FT	31.6 471 2.1 1940	7 75	6.09 8.4 4.0 374	9.99 15 7.0 614	269 2380 9.8 14920	98.3 688 23 6040	40.6 215 20 2420	112 580 27 6900	552 1890 79 32820	53.7 508 9.6 3300	25.5 346 4.5 1570	253 2440 3.6 15080
STATIST	CICS OF MO	ONTHLY MEA	N DATA F	FOR WATER	YEARS 1938	- 2001,	BY WATER Y	EAR (WY)				
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	71.0 1025 1974 .31 1992	29.1 244 1974 1.65 1992	20.2 281 1974 2.13 1940	21.3 343 1974 1.00 1940	49.3 480 1993 1.97 1940	81.6 954 1973 3.82 1991	85.6 766 1973 2.36 1992	131 1038 1995 2.30 1992	152 1491 1965 3.90 1940	134 1503 1993 1.79 1991	84.9 794 1950 .65 1991	94.9 1895 1973 .34 1991
SUMMARY	SUMMARY STATISTICS FOR 2000 CALENDAR Y						OR 2001 WAT	ER YEAR		WATER YE	ARS 1938	3 - 2001
SUMMARY STATISTICS ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS			4230 2.0 2.3 46850 95 11 3.3	Mar 25 Sep 16 Sep 12		2440 2.1 2.6 3290 18.16 2.1 86440 204 15 5.0	Sep 19 Oct 2 Oct 1 Sep 18 Sep 18 Oct 1		80.4 377 10.1 16800 .00 .14 24100 20.38 .00 58210 134 12 3.2	Sep Jul Aug Sep Sep	1973 1946 27 1973 1938 16 1946 26 1973 26 1973 tt times	

e Estimated

07143330 ARKANSAS RIVER NEAR HUTCHINSON, KS

LOCATION.--Lat $37^{\circ}56^{\circ}47^{\circ}$, long $97^{\circ}46^{\circ}29^{\circ}$, in SW $^{1}/_{4}$ NW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.21, T.24 S., R.4 W., Reno County, Hydrologic Unit 11030010, on right bank at downstream side of county highway bridge, 3.0 mi north of Haven, 4.5 mi downstream from Cow Creek, 11 mi southeast of Hutchinson, and at mile 800.3.

DRAINAGE AREA.--38,910 mi², of which 7,186 mi² is probably noncontributing.

PERIOD OF RECORD. -- October 1959 to current year.

REVISED RECORDS.--WDR KS-74-1: 1973(M).

GAGE.--Water-stage recorder. Datum of gage is 1,454.10 ft above sea level. Prior to June 22, 1960, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow slightly regulated since 1943 by John Martin Reservoir (station 07130000). Extensive diversions upstream from station for irrigation. Satellite telemeter at

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s and maximum (*):

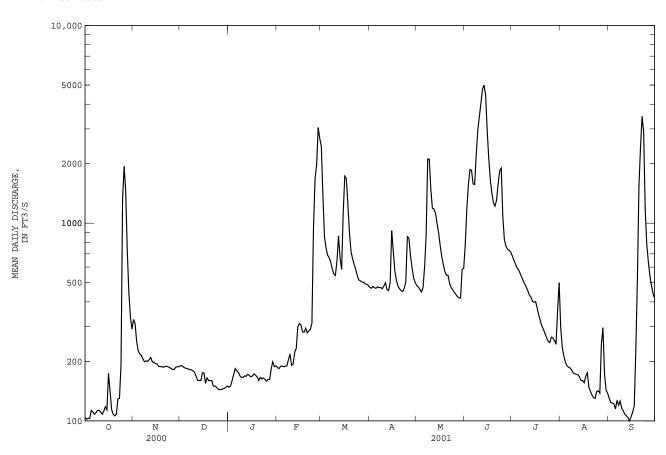
Date	Ti	me	Discharge (ft ³ /s)	e Gag	e height (ft)		Date	Tim	e	Discharge (ft ³ /s)		height [ft]
Oct 25 Feb 27 Mar 15 May 8	18 21 20 22	00 00	2,620 3,500 1,870 2,350		6.25 6.87 5.60 6.04		Jun 5 Jun 13 Jun 24 Sep 22	010 050 025 190	00 55	1,930 *5,040 2,060 3,650	*	5.66 7.79 5.79 6.97
		DISCHA	ARGE, CUBIC	C FEET PE		WATER YE Y MEAN VA	AR OCTOBER	2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	104 102 103 103 113	326 310 252 226 218	190 190 187 185 184	e148 e150 e160 e172 e184	186 184 189 189	2450 1410 859 752 690	473 469 479 471 469	484 476 463 449 471	780 1180 1570 1870 1850	685 653 624 595 583	297 235 213 198 190	130 124 123 122 115
6 7 8 9 10	111 108 110 113 113	215 206 199 201 200	183 182 181 179 176	179 176 169 166 166	189 190 204 218 191	670 637 587 554 544	477 472 473 466 482	600 871 2110 2110 1480	1580 1570 2210 2950 3460	559 535 512 493 474	187 185 181 175 173	127 120 126 116 112
11 12 13 14 15	111 108 112 118 114	204 209 199 198 195	168 e160 e160 e160 e175	169 168 172 170 167	194 222 233 300 311	644 862 667 583 1130	500 461 456 500 916	1190 1180 1120 995 890	4040 4760 5000 4450 2960	455 432 423 402 398	172 171 167 160 160	108 106 104 100 105
16 17 18 19 20	174 141 114 108 106	194 189 188 188	e175 e155 e165 e160 e160	169 173 170 167 160	305 282 281 294 279	1730 1680 1240 888 719	722 573 514 480 466	768 677 616 569 545	2140 1660 1420 1270 1220	401 371 342 320 301	156 168 175 148 141	111 119 228 518 1550
21 22 23 24 25	108 129 130 192 1330	188 189 188 186 184	e160 e150 e150 e148 e145	166 163 165 162 159	285 290 312 940 1680	660 619 584 542 516	456 451 468 505 855	545 496 472 460 447	1310 1580 1840 1900 1080	290 276 263 253 249	135 131 130 141 142	2430 3470 2900 1170 781
26 27 28 29 30 31	1940 1440 729 446 336 291	182 182 187 188 188	e144 e144 e145 e146 e148 e150	162 162 184 199 188 190	1970 3050 2690 	511 504 502 494 491 485	839 686 596 529 500	436 426 419 418 584 591	826 766 739 730 716	265 263 255 244 360 500	138 245 296 172 143 138	639 542 484 441 417
MEAN MAX MIN AC-FT	302 1940 102 18560	206 326 182 12230	165 190 144 10130	170 199 148 10420	566 3050 184 31430	813 2450 485 49990	540 916 451 32140	753 2110 418 46330	1981 5000 716 117900	412 685 244 25340	176 297 130 10840	585 3470 100 34790

07143330 ARKANSAS RIVER NEAR HUTCHINSON, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	542 7342 1974 40.8 1965	367 1586 1974 52.1 1992	289 1841 1974 59.6 1992	277 1520 1974 69.2 1992	397 1868 1993 64.2 1992	673 4086 1973 80.7 1992	723 5865 1973 73.3 1989	676 2727 1995 56.5 1992	900 5299 1965 167 1988	792 6279 1993 62.0 1991	496 1749 1993 53.1 1991	509 3345 1973 51.5 1964
SUMMARY	STATIST	ICS	FOR 2	2000 CALEI	NDAR YEAR	FC	DR 2001 W	NATER YEAR		WATER YE	ARS 1960	- 2001
	MEAN ANNUAL M ANNUAL ME			530			553			554 1667 108		1974 1991
HIGHEST	DAILY ME	EAN		6270	Mar 27		5000	Jun 13		24200	Sep :	30 1973
	DAILY MEA			102	Oct 2		100	Sep 14		28		14 1980
		MINIMUM		106	Sep 30		106	Oct 1		33		9 1980
	PEAK FLO						5040	Jun 13		24700		28 1973
	PEAK STA						7.7 98	79 Jun 13 Oct 1		12.95 27		28 1973 13 1980
	RUNOFF (A			384700			400100	OCC I		401200	000	13 1900
	ENT EXCE			1080			1360			1160		
	ENT EXCER			314			279			280		
90 PERC	ENT EXCE	EDS		130			130			96		

e Estimated



07143375 ARKANSAS RIVER NEAR MAIZE, KS

LOCATION.--Lat $37^{\circ}46^{\circ}53^{\circ}$, long $97^{\circ}23^{\circ}33^{\circ}$, in NW $^{1}/_{4}$ NE $^{1}/_{4}$ Sec.23, T.26 S., R.1 W., Sedgwick County, Hydrologic Unit 11030010, on right bank at downstream side of county highway bridge, 4.0 mi east of Maize, 3.5 mi south-southwest of Valley Center, 2.8 mi downstream from Little Arkansas River Floodway Diversion channel, and at mile 772.2.

DRAINAGE AREA.--39,110 mi², of which 7,186 mi² is probably noncontributing.

PERIOD OF RECORD. -- March 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1317.08 ft above sea level (Wichita-Valley Center Flood Control Project).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow slightly regulated since Oct. 1948 by John Martin Reservoir (station 07130000). Extensive diversions upstream from station for irrigation. Natural flow is significantly altered, since May 1957, by diversion from the Little Arkansas River into the stream upstream from station during high-flow events. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 $\mathrm{ft^3/s}$ and maximum (*):

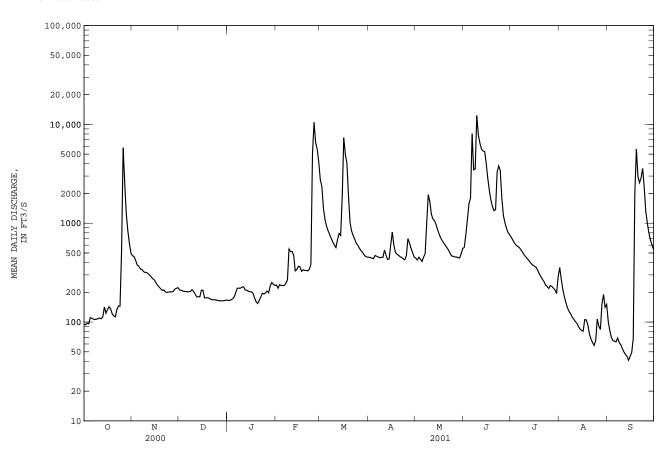
Date	Ti	me	Discharge (ft ³ /s)	e Gag	e height (ft)		Date	Tim	e	Discharge (ft ³ /s)		height (ft)
Oct 26 Feb 25 Mar 16 Jun 6	08 03 06 15	30 00	7,290 13,100 8,650 11,600		10.42 12.04 10.85 11.67		Jun 9 Jun 23 Sep 19 Sep 23	080 230 050 110	0	*14,400 3,930 6,870 3,710	1	2.36 9.23 0.28 9.14
		DISCHA	ARGE, CUBI	C FEET PE		WATER YE Y MEAN VA		2000 TO	SEPTEMBI	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	468	212	e166	237	2750	453	443	569	724	355	102
2	94	460	209	e165	220	2360	448	425	763	675	271	82
3	97	420	207	e168	239	1410	444	453	1090	633	214	70
4	96	377	204	e172	234	1090	438	433	1570	604	179	65
5	111	367	204	e180	234	933	472	410	1800	584	156	64
6	109	345	202	e200	235	836	463	453	8050	571	139	63
7	107	340	203	e220	247	768	455	493	3470	544	128	69
8	106	324	204	e220	267	700	447	1000	3550	516	121	62
9	107	318	213	e220	548	642	452	1940	12300	487	112	59
10	108	317	204	226	516	601	451	1650	7790	462	107	54
11	110	308	e192	227	518	567	535	1230	6470	443	101	50
12	108	298	e180	211	470	684	474	1100	5610	425	97	47
13	113	285	e180	210	329	786	430	1060	5380	405	90	45
14	142	274	e180	205	340	752	436	966	5330	387	85	41
15	123	266	e210	203	367	1850	604	855	4070	375	82	45
16	134	249	e210	202	362	7320	811	771	2870	366	81	49
17	143	236	e176	196	326	4960	601	705	2160	357	106	68
18	136	226	e176	175	338	4060	508	663	1720	332	105	2000
19	121	217	e176	160	333	1900	486	626	1480	306	93	5600
20	115	209	e174	e154	333	1020	473	593	1340	287	76	2950
21	113	211	e170	e166	329	834	458	564	1370	270	67	2570
22	134	202	e168	e180	342	748	451	533	3290	256	62	2870
23	145	199	e168	196	387	688	435	495	3790	236	58	3580
24	145	201	e168	192	5040	627	426	465	3430	228	65	2320
25	532	202	e166	198	10500	596	470	463	1810	219	107	1320
26 27 28 29 30 31	5800 2540 1240 836 623 495	202 204 215 219 223	e165 e164 e164 e164 e165 e167	206 198 232 251 241 234	6550 5610 4180 	559 528 509 478 460 454	699 630 557 501 455	455 456 449 444 491 553	1200 1010 884 803 765	234 229 220 211 194 287	91 84 152 190 141 151	1000 796 675 601 541
MEAN	480	279	185	199	1415	1370	499	698	3191	389	125	929
MAX	5800	468	213	251	10500	7320	811	1940	12300	724	355	5600
MIN	94	199	164	154	220	454	426	410	569	194	58	41
AC-FT	29510	16630	11400	12250	78610	84240	29680	42920	189900	23930	7670	55260

07143375 ARKANSAS RIVER NEAR MAIZE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	319 758 1997 7.65 1992	686 4999 1999 41.6 1992	301 756 1997 45.5 1992	267 775 1998 58.3 1992	593 2831 1993 53.1 1992	767 2998 2000 72.8 1991	647 2076 1998 64.3 1989	1300 6416 1993 49.6 1992	1349 4603 1995 138 1991	1448 12920 1993 23.9 1991	679 1995 1993 16.2 1991	461 1393 1996 31.7 1991
SUMMARY	STATIST	ICS	FOR 2	2000 CALEI	NDAR YEAR	F	OR 2001	WATER YEA	AR.	WATER YE	EARS 1988	- 2001
	MEAN ANNUAL M ANNUAL MI			687			804			735 2756 83.6		1993 1991
HIGHEST	DAILY M	EAN		16400	Mar 24		12300	Jun	9	42500	Jul :	L5 1993
LOWEST	DAILY MEA	AN		94	Oct 2		41	Sep 1	.4	3.5	Oct 1	L7 1991
ANNUAL	SEVEN-DAY	Y MINIMUM		99	Sep 28		47	Sep 1	.0	4.0	Oct 1	l4 1991
	I PEAK FLO						14400	Jun	9	45900	Nov	1 1998
	I PEAK STA						12.		9	16.93		1 1998
	ANEOUS LO						38	Sep 1	.4	3.4	Oct 1	l6 1991
	RUNOFF (A	- ,		498800			582000			532700		
	ENT EXCE			1140			1870			1290		
	ENT EXCE			324			333			306		
90 PERC	ENT EXCE	EDS		123			106			65		

e Estimated



07143665 LITTLE ARKANSAS RIVER AT ALTA MILLS, KS

LOCATION.--Lat $38^{\circ}06^{\circ}44^{\circ}$, long $97^{\circ}35^{\circ}30^{\circ}$, in SW $^{1}/_{4}$ NW $^{1}/_{4}$ Sec.30, T.22 S., R.2 W., Harvey County, Hydrologic Unit 11030012, on right bank at downstream side of county highway bridge, 0.4 mi south of Alta Mills, 0.8 mi downstream from Sand Creek, and at mile 50.1.

DRAINAGE AREA.--736 mi^2 , of which 55 mi^2 is probably noncontributing.

PERIOD OF RECORD. -- June 1973 to current year.

REVISED RECORDS.--WDR KS-74-1: 1974(M). KS-80-1: 1980(M). KS-86-1: 1986(M).

GAGE.--Water-stage recorder. Datum of gage is 1,391.40 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by ground-water withdrawals for irrigation and return flow from irrigated areas. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

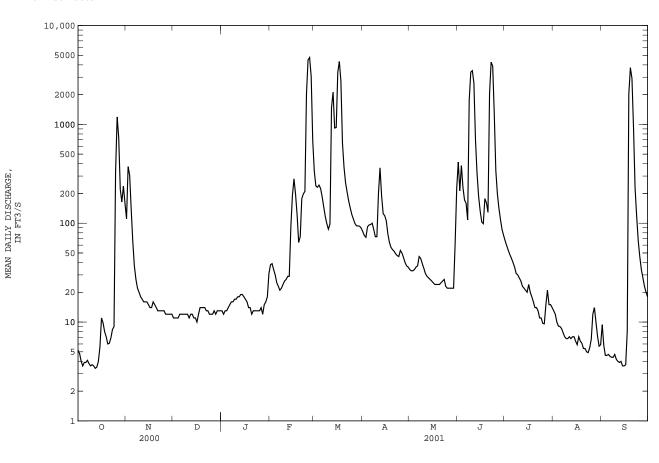
Date	Tin	ne	Discharge (ft ³ /s)	e Gag	e height (ft)		Date	Time	è	Discharge (ft ³ /s)	Gage	e height (ft)
Oct 26 Feb 26 Mar 13 Mar 17	170 010 040 110)0)0	1,310 *5,000 2,350 4,450	*	10.43 20.65 14.04 19.45		Jun 10 Jun 22 Sep 19	0300 1900 1500)	3,700 4,520 3,890		17.69 19.60 18.15
		DISCHA	RGE, CUBIC	FEET PE		WATER YE Y MEAN VA	AR OCTOBER LUES	R 2000 TO	SEPTEMB	BER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	5.2 4.8 4.0 3.6 3.9	111 374 306 135 65	11 11 11 11 12	13 e12 13 13 14	38 39 34 30 25	335 238 231 243 225	82 75 72 92 96	34 33 33 34 36	416 213 383 230 172	66 59 53 48 44	13 12 10 9.1 9.0	9.4 5.8 4.6 4.6 4.7
6 7 8 9 10	3.9 4.1 3.8 3.6 3.7	37 27 22 20 18	12 12 12 12 12	15 16 16 17 17	23 21 22 e24 e26	186 147 117 99 87	97 100 86 73 73	37 46 44 39 35	159 108 1760 3380 3500	40 36 31 30 28	8.6 7.8 7.1 6.8 6.8	4.5 4.4 4.4 4.7 4.2
11 12 13 14 15	3.6 3.4 3.5 4.0 5.6	17 16 16 16 15	11 12 12 11 11	18 18 19 19	27 29 29 91 189	98 1480 2120 919 929	201 363 190 125 119	31 29 28 27 26	2610 701 319 187 133	26 23 22 21 20	7.1 6.8 7.1 7.1 6.4	4.0 3.9 4.0 3.6 3.6
16 17 18 19 20	9.8 8.0 7.1 6.0	14 14 16 15	e10 e12 14 e14 14	17 16 e14 e14 e12	281 198 122 64 73	3360 4330 2740 643 366	106 78 64 57 54	25 24 24 24 24	103 99 177 161 129	24 20 18 16 14	5.9 7.1 6.4 6.1 5.4	3.7 8.1 2040 3740 2920
21 22 23 24 25	6.1 6.9 8.4 9.0	13 13 13 13 13	14 e13 13 e12 12	13 13 13 13 13	177 198 210 2040 4490	255 205 167 142 122	52 49 47 46 53	25 26 27 23 22	2070 4260 3890 1300 342	14 13 11 11 9.7	5.4 5.0 4.9 5.5 6.7	925 226 119 67 46
26 27 28 29 30 31	1190 732 220 164 237 160	12 12 12 12 12	12 13 12 13 13	14 12 15 16 18 31	4750 3060 680 	110 99 94 94 93 89	50 45 40 37 36	22 22 22 22 22 62 225	198 141 108 86 75	9.6 15 21 15 15	12 14 10 7.2 5.7 5.9	34 28 23 20 18
MEAN MAX MIN AC-FT	102 1190 3.4 6290	46.4 374 12 2760	12.2 14 10 748	15.5 31 12 956	607 4750 21 33700	657 4330 87 40390	88.6 363 36 5270	36.5 225 22 2240	914 4260 75 54370	25.4 66 9.6 1560	7.67 14 4.9 472	343 3740 3.6 20410

07143665 LITTLE ARKANSAS RIVER AT ALTA MILLS, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	217 2314 1974 .19 1992	190 1983 1999 3.92 1991	58.6 505 1974 3.76 1991	41.3 340 1974 4.98 1991	158 1240 1993 4.02 1992	388 2489 1987 6.11 1991	256 990 1974 4.63 1992	404 2496 1995 7.58 1992	403 1816 1977 10.8 1994	314 3900 1993 2.13 1991	198 1032 1987 2.59 1984	119 868 1977 1.79 1984
SUMMARY	STATIST:	ICS	FOR :	2000 CALEN	DAR YEAR	F	OR 2001 WA	TER YEAR		WATER YE	ARS 1974	- 2001
	MEAN ANNUAL I ANNUAL M			252			234			229 935 16.2		1993 1991
	DAILY M			10600	Mar 25		4750	Feb 26		15300		2 1998
	DAILY MEA	AN Y MINIMUM		3.4 3.7	Oct 12 Oct 8		3.4 3.7	Oct 12 Oct 8		.00		.5 1991 7 1991
MAXIMUM	PEAK FLO	WC					5000	Feb 26		30100	Oct 1	2 1973
	I PEAK ST						20.65	Feb 26 Oct 12		27.42		.2 1973 .5 1991
	INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT)			182600			169200	OCL 12		166100	Aug 1	.5 1991
	CENT EXCE			490			325			325		
	CENT EXCE			28			22			22		
90 PERC	CENT EXCE	EDS		5.6			5.9			4.9		

e Estimated



07143672 LITTLE ARKANSAS RIVER AT HIGHWAY 50 NEAR HALSTEAD, KS

LOCATION.--Lat $38^{\circ}01'43"$, long $97^{\circ}32'25"$, in NW $^1/_4$ NE $^1/_4$ NE $^1/_4$ sec.28, T.23 S., R.02 W., Harvey County, Hydrologic Unit 11030012, on left bank at downstream side of State Highway 50, 3.4 mi upstream of Black Kettle Creek, 2 mi north and 1.3 mi west of Halstead, and at mile 41.4.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--759 mi^2 , of which about 74 mi^2 is probably noncontributing.

PERIOD OF RECORD. -- May 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,370.55 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow of stream affected by ground-water withdrawals for irrigation and return flow from irrigated areas. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ${\rm ft^3/s}$ and maximum (*):

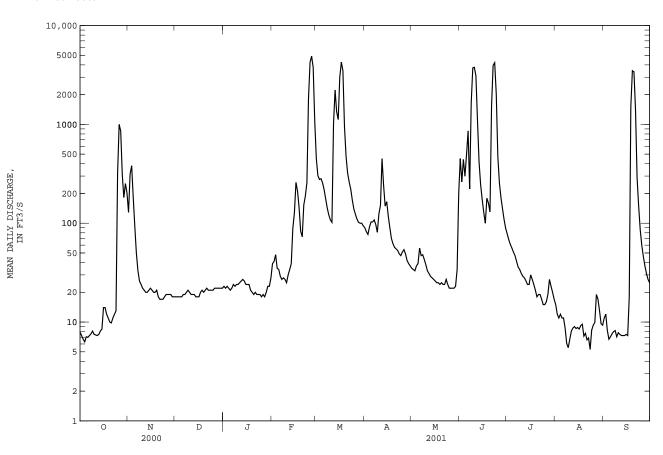
Date	Tir	me	Discharge (ft ³ /s)	Gag	e height (ft)		Date	Time	e	Discharge (ft ³ /s)		e height (ft)
Oct 2 Feb 2 Mar 1 Mar 1	6 090 3 110	00	1,470 *4,990 2,500 4,440	*	13.23 22.09 16.28 20.92		Jun 5 Jun 10 Jun 23 Sep 19	220 050 040 220	0 0	1,610 3,890 4,460 3,930	1	13.68 19.69 20.96 19.79
		DISCHA	RGE, CUBIC	FEET PE		WATER YE Y MEAN VA	AR OCTOBER LUES	R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	7.9 7.3 6.7 6.3 7.1	129 315 381 182 93	18 18 18 18	23 22 23 22 21	39 41 48 35 34	454 304 277 282 256	90 82 77 92 103	35 34 33 37 39	451 262 442 299 494	78 68 61 56 51	15 12 11 12 11	11 12 8.2 6.7 7.1
6 7 8 9 10	7.0 7.3 7.6 8.1 7.5	50 33 26 24 22	19 19 20 21 20	22 24 23 24 24	29 27 28 27 25	218 176 142 121 108	103 108 97 81 e124	56 47 48 43 38	859 222 1640 3730 3780	47 41 36 34 31	11 8.7 6.1 5.5 6.7	7.6 8.0 8.2 7.1 7.8
11 12 13 14 15	7.4 7.3 7.5 8.1 8.5	21 20 20 21 22	e19 19 19 18 18	25 26 27 26 24	30 34 39 89 127	102 1010 2230 1340 1120	152 451 242 149 165	33 31 29 28 27	3100 1100 420 246 175	29 28 26 24 24	8.1 8.7 9.0 8.6 8.8	7.5 7.3 7.3 7.3 7.5
16 17 18 19 20	14 14 12 11	21 20 20 21 18	18 20 21 20 21	24 24 21 20 19	259 211 144 83 73	3000 4270 3500 953 478	118 90 70 62 57	26 25 25 24 25	129 100 179 e160 e130	30 27 24 21 18	8.5 9.2 9.5 7.2 7.7	7.3 18 1510 3490 3400
21 22 23 24 25	9.8 11 12 13 317	17 17 17 18 19	22 e21 21 21 21	20 19 19 19 18	153 189 258 1810 4240	322 261 222 172 139	55 53 49 47 51	24 24 27 24 22	1540 3950 4210 2040 480	19 19 17 15	6.6 6.9 5.3 8.3 9.3	1400 289 150 86 60
26 27 28 29 30 31	e1000 e854 e309 182 252 203	19 19 19 18 18	22 e22 22 22 22 22	19 18 20 23 23 28	4900 3770 1080 	123 110 102 100 100 94	54 49 42 39 37	22 22 22 23 34 199	257 182 140 109 89	16 19 27 23 20 17	9.9 19 17 13 9.6 9.3	46 37 31 27 25
MEAN MAX MIN AC-FT	108 1000 6.3 6620	54.7 381 17 3250	20.0 22 18 1230	22.3 28 18 1370	636 4900 25 35350	712 4270 94 43810	99.6 451 37 5930	36.3 199 22 2230	1030 4210 89 61320	31.0 78 15 1910	9.63 19 5.3 592	357 3490 6.7 21220

07143672 LITTLE ARKANSAS RIVER AT HIGHWAY 50 NEAR HALSTEAD, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	132 425 1999 13.2 1997	370 1818 1999 15.4 1996	72.1 247 1998 17.5 1996	52.3 122 1999 16.8 1996	253 636 2001 18.6 1996	522 1551 2000 15.7 1996	279 815 1999 14.8 1996	227 327 1999 36.3 2001	444 1030 2001 41.1 1998	291 876 1999 23.0 1996	230 620 1999 9.63 2001	170 360 1997 8.64 2000
SUMMARY	STATIST	ICS	FOR 2	2000 CALEN	DAR YEAR	FC	OR 2001 WAT	TER YEAR		WATER YEA	ARS 1996	- 2001
	MEAN CANNUAL M ANNUAL MI			245			255			253 528 91.2		1999 1996
	DAILY ME			8010 6.3	Mar 26 Oct 4		4900 5.3	Feb 26 Aug 23		9570 3.6		3 1998 9 1998
MAXIMUM MAXIMUM	1 PEAK FLO 1 PEAK STA	AGE		7.0	Oct 2		7.0 4990 22.09	Oct 2 Feb 26 Feb 26		4.7 10300 27.13	Nov Nov	6 1998 2 1998 2 1998
ANNUAL	CANEOUS LO RUNOFF (A CENT EXCE	AC-FT)		177600 580			4.8 184800 429	Aug 9		3.3 183200 567	Sep 1	9 1998
50 PERC	CENT EXCE	EDS		34 9.0			26 8.2			38 12		

e Estimated



07143672 LITTLE ARKANSAS RIVER AT HIGHWAY 50 NEAR HALSTEAD, KS--Continued

WATER-OUALITY RECORDS

PERIOD OF RECORD. -- May 1998 to current year.

PERIOD OF DAILY RECORD. --

SPECIFIC CONDUCTANCE: May 1998 to current year. pH: May 1998 to current year. WATER TEMPERATURE: May 1998 to current year. DISSOLVED OXYGEN: October 1998 to current year. TURBIDITY: October 1998 to current year.

INSTRUMENTATION. -- Multparameter water-quality monitor.

REMARKS.--Records good. Interruptions in record are due to ice condtions or malfunction of the recording instrument or sensors. Instruments used to measure trubidity conform to ISO 7027 standards.

EXTREMES FOR PERIOD OF RECORD .--

SPECIFIC CONDUCTANCE: Maximum, 2,020 microsiemens/cm, Nov. 27, 1999; minimum, 85 microsiemens/cm, Nov. 1, 1998 pH: Maximum, 9.0 standard units, July 8, 2001; minimum, 6.6 standard units, Oct. 5, 1998.

WATER TEMPERATURE: Maximum, 31.3 oC, Aug. 6, 2001; minimum, 0.0 oC, Jan. 3, 1999.

DISSOLVED OXYGEN: Maximum 21.9 mg/L, July 10, 2001; minimum, 3.2 mg/L, Aug. 31, 1999.

TURBIDITY: Maximum, >1,500 NTU, Oct. 18, 1998; minimum, 5.1 NTU, Dec. 7, 2000.

EXTREMES FOR CURRENT YEAR . --

SPECIFIC CONDUCTANCE: Maximum, 1,960 microsiemens/cm, Dec. 22; minimum, 86 microsiemens/cm, June 5. SPECIFIC CONDUCTANCE. MAXIMUM, 1,960 MICROSTERBERS/CHM, Dec. 27 MINIMUM, 86 MICROSTERBERS/CHM, Dec. 27 MINIMUM, 8.0 Standard units, Sept. 19. WATER TEMPERATURE: Maximum, 31.3°C, Aug. 6; minimum, 0.0°C, Feb. 16. DISSOLVED OXYGEN: Maximum, 21.9 mg/L, July 10; minimum, 4.0 mg/L, June 22. TURBIDITY: Maximum, >1,500 ntu, Mar. 13; minimum, 5.1 ntu, Dec. 7.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		N	OVEMBER		D	ECEMBER			JANUARY	7
1	1500	1490	1500	600	397	521	1570	1570	1570	1810	1780	1800
2	1540	1500	1520	519	365	451	1580	1570	1570	1790	1740	1780
3	1580	1540	1560	536	380	455	1610	1580	1600	1750	1700	1730
4	1580	1560	1570	424	396	404	1610	1590	1600	1750	1700	1720
5	1560	1510	1530	421	406	413	1600	1580	1590	1770	1740	1760
6	1510	1480	1490	435	410	421	1600	1580	1590	1740	1660	1700
7	1510	1490	1500	463	435	449	1620	1590	1600	1660	1630	1650
8	1510	1500	1500	499	463	480	1620	1580	1610	1650	1620	1630
9	1510	1500	1510	527	499	512	1590	1540	1570	1650	1620	1630
10	1510	1480	1500	567	527	545	1580	1540	1560	1680	1640	1660
11	1480	1460	1470	605	567	588	1610	1580	1600	1770	1680	1730
12	1470	1440	1460	637	605	624	1640	1580	1620	1820	1770	1790
13	1440	1360	1410	672	637	651	1580	1560	1570	1800	1780	1790
14	1360	1240	1310	728	672	701	1610	1560	1590	1830	1780	1810
15	1240	1230	1240	800	728	760	1620	1600	1610	1860	1820	1840
16	1230	1070	1110	871	800	834	1610	1590	1600	1880	1830	1860
17	1120	1090	1110	943	871	910	1620	1560	1600	1860	1820	1850
18	1090	1060	1070	1010	943	973	1580	1540	1560	1860	1660	1740
19	1070	1060	1060	1080	1010	1050	1640	1550	1590	1680	1600	1650
20	1080	1070	1080	1170	1080	1130	1830	1640	1740	1600	1560	1580
21	1090	1070	1080	1220	1170	1200	1940	1830	1900	1650	1560	1600
22	1110	1080	1100	1220	1160	1180	1960	1910	1950	1620	1560	1590
23	1170	1080	1100	1270	1180	1220	1910	1740	1820	1630	1530	1590
24	1240	1170	1230	1330	1270	1310	1750	1730	1730	1550	1500	1530
25	1220	223	766	1410	1330	1370	1780	1730	1760	1570	1500	1540
26 27 28 29 30 31	426 439 341 458 433 498	184 292 293 335 293 324	263 360 324 415 330 411	1470 1530 1580 1610 1600	1410 1470 1530 1580 1570	1440 1510 1560 1600 1580	1840 1900 1860 1790 1800 1840	1780 1840 1770 1760 1760 1800	1820 1880 1820 1770 1790 1820	1540 1540 1550 1580 1650 1610	1490 1510 1500 1510 1550 1530	1520 1540 1520 1550 1600 1560
MONTH	1580	184	1130	1610	365	895	1960	1540	1680	1880	1490	1670

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SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

D.	FECTI-TC	CONDUCTA	TACE (1-11C	CONTENED	Ci Ai 23	DEG. C/,	MUTEL IE	AIC OCTOL	DEIC 2000	TO DEFINE	DEIC ZOOI	
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	1720 1670 1900 1640 1640	1610 1380 1360 1550 1530	1670 1490 1610 1610 1580	454 578 723 724 882	387 454 578 661 720	420 514 648 692 799	1300 1320 1320 1380 1380	1280 1300 1310 1320 1160	1290 1300 1310 1350 1220	1330 1370 1390 1370 1390	1280 1330 1350 1340 1170	1310 1350 1380 1360 1350
6 7 8 9 10	1580 1520 1470 1400 1400	1430 1360 1360 1350 1310	1500 1450 1420 1380 1360	980 994 990 963 997	837 975 962 955 959	905 986 971 960 974	1160 1150 1160 1250 1280	1110 1110 1120 1160 802	1120 1130 1140 1200 1120	1330 1460 1610 1670 1680	1120 1260 1460 1610 1540	1230 1390 1540 1640 1620
11 12 13 14 15	1350 1260 1280 1400 1180	1240 1220 1180 1170 946	1300 1240 1240 1270 1030	1020 1080 366 347 348	997 340 304 288 193	1010 629 326 308 307	1210 1190 1020 927 799	1070 508 832 773 717	1170 775 965 846 768	1580 1590 1560 1470 1400	1540 1560 1470 1400 1380	1550 1580 1520 1430 1390
16 17 18 19 20	1150 1080 902 812 811	988 887 798 773 792	1060 982 859 795 803	228 204 258 402 537	189 179 186 258 402	212 185 223 335 465	960 1000 941 1040 1110	706 850 902 930 1040	827 942 926 992 1080	1400 1400 1400 1360	1380 	1400 e1390 e1380 e1340 e1320
21 22 23 24 25	819 916 820 654 206	722 646 622 189 167	760 769 738 344 184	679 765 866 979 1030	537 679 765 866 979	611 725 815 926 1000	1180 1220 1250 1310 1360		1140 1200 1230 1290 1330	 1290 1310 1280	1280	e1310 e1300 1280 1290 1210
26 27 28 29 30 31	178 239 387 	166 178 239 	172 210 315 	1080 1140 1180 1220 1250 1280	1030 1080 1140 1180 1220 1230	1060 1100 1150 1200 1230 1260	1490 1550 1630 1550 1320	1360 1490 1550 1310 1290	1420 1520 1590 1420 1300	1180 1170 1180 1180 1310 1410	1140 1140 1140 1120 1180 576	1160 1150 1160 1150 1220 1080
MONTH	1900	166	1040	1280	179	740	1630	508	1160			1350
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBI	ER
1 2 3 4 5	1420 793 644 484 426	740 610 359 377 86	999 684 510 443 352	734 787 835 881 910	671 732 787 835 881	705 762 806 857 892	1350 1400 1440 1330 1150	1330 1340 1330 1140 1120	1340 1350 1420 1220 1140	1750 1770 1810 1790 1740	1620 1700 1770 1740 1620	1700 1740 1800 1770 1690
6 7 8 9 10	299 512 543 216 207	96 299 87 122 186	215 415 292 173 193	947 966 965 983 985	910 943 936 945 959	935 957 951 964 976	1160 1150 1120 1080 1040	1120 1070 1040	1150 1130 1090 1060 1030	1620 1490 1400 1330 1310	1490 1400 1330 1310 1240	1570 1460 1360 1320 1270
11 12 13 14 15	251 346 415 493 588	127 247 346 415 493	220 294 380 453 547	997 988 973 983 995	976 960 962 966 980	984 970 969 975 989	1010 995 996 993 966	988	1000 991 993 980 950	1250 1220 1210 1180 1140	1220 1210 1180 1140 1060	1240 1220 1200 1170 1120
16 17 18 19 20	650 745 860 758 1260	588 650 529 439 758	616 697 785 528 1070	1010 1010 996 929 926	862 996 874 876 909	967 1000 935 916 915	960 955 976 1010 1030	941 914 923 976 1010	951 941 949 997 1020	1060 1000 160 145	1000 117 97 126	1040 118 136
21 22 23 24 25	1060 207 259 351 433	191 190 199 259 351	473 199 226 305 393	937 964 991 1030 1040	918 934 964 991 1030	928 946 978 1010 1040	1030 1020 1010 965 907	1020 1000 944 899 882	1020 1010 994 930 896	208 255 293 331 379	145 208 255 293 331	174 233 276 311 355
26	496	432	465	1040	991	1020	892	879	887	417	379	398
27 28 29 30 31	540 599 594 671	495 540 552 579	520 579 575 624	991 1000 1000 1220 1350	940 951 982 1000 1220	965 985 988 1070 1310	1010 1070 1220 1490 1620	887 1010 1070 1220 1490	941 1040 1120 1390 1590	454 482 519 544	417 454 482 519	435 469 501 531

ARKANSAS RIVER BASIN

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07143672 LITTLE ARKANSAS RIVER AT HIGHWAY 50 NEAR HALSTEAD, KS--Continued PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN N	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		OCTOBER		1							JANUAR	
		8.2 8.2 8.1 8.1 8.1		7.6 7.6 7.6 7.5 7.6						8.1 8.1 8.1 8.1 8.0		
6 7 8 9 10	8.4 8.4 8.4 8.4	8.2 8.3 8.3 8.3	8.3 8.3 8.3 8.3	7.8 7.8 7.8 7.8 7.8	7.6 7.7 7.7 7.7 7.7	7.7 7.8 7.8 7.8 7.7	8.3 8.3 8.1 8.2 8.1	8.2 8.0 8.0 8.0	8.3 8.3 8.1 8.1	8.1 8.1 8.2 8.2	7.9 8.0 8.0 8.0	8.0 8.0 8.1 8.1
12 13 14	8.3 8.2 8.1 8.1	8.3 8.2 8.1 8.0 8.0	8.3 8.2 8.2 8.1 8.0	7.8 7.8 7.8 7.9 7.9	7.7 7.8 7.8 7.8 7.8	7.8 7.8 7.8 7.8 7.9	8.2 8.2 8.1 8.1	8.0 8.1 8.1 8.1 8.0	8.1 8.1 8.1 8.1	8.2 8.2 8.2 8.2	8.0 8.0 8.0 8.0	8.1 8.1 8.1 8.1 8.2
16 17 18 19 20	8.3 8.4 8.2 8.1 8.0	8.1 8.2 8.1 8.0 7.9		7.9 7.9 7.9 7.9			8.2 8.2 8.1 8.1 8.1	8.0 8.0 8.0 8.1 8.0	8.1 8.1 8.0 8.1 8.0	8.2 8.3 8.2 8.2	8.1 8.1 8.1 8.1	8.2 8.2 8.1 8.1 8.2
21 22 23 24 25	7.9 7.9 7.9 7.9 7.9	7.9 7.9 7.8 7.8 7.4	7.9 7.9 7.9 7.8 7.7	7.9 7.9 7.9 8.0	7.9 7.9 7.9 7.9 7.9	7.9 7.9 7.9 8.0 7.9				8.2 8.2 8.2 8.2 8.2		
27 28 29	7.4 7.3 7.5 7.7 7.6 7.6	7.2 7.2 7.3 7.4 7.5 7.5	7.3 7.3 7.4 7.6 7.5	7.9 7.9 7.9 8.0 8.0	7.9 7.9 7.9 7.9 8.0	7.9 7.9 7.9 7.9 8.0	8.1 8.1 8.1 8.1 8.1	8.0 8.0 8.0 8.0 8.0	8.1 8.1 8.1 8.1 8.1	8.3 8.2 8.2 8.3 8.3	8.1 8.1 8.1 8.1 8.1	8.1 8.2 8.2 8.2 8.2
MAX MIN	8.4 7.3	8.3 7.2	8.3 7.3	8.0 7.5	8.0 7.5	8.0 7.5	8.3 8.1	8.2 8.0	8.3 8.0	8.3 8.0	8.1 7.9	8.2 8.0
DAY	MAX	MIN N	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	:	FEBRUARY			MARCH			APRIL			MAY	
	:				MARCH			APRIL		MAX 8.6 8.4 8.3 8.2 8.3	MAY	
1 2 3 4 5	8.3 8.3 8.2 8.2 8.2 8.2	8.2 8.2 8.1 8.1 8.1	8.2 8.2 8.2 8.1 8.1		7.8 7.8 7.9 7.9	7.8 7.9 7.9 8.0 8.0 8.1 8.1 8.1 8.1	8.6 8.5 8.6 8.5 8.4 8.3 8.3 8.4 8.4	8.4 8.4 8.4 8.3 8.3 8.3 8.3 8.3	8.5 8.5 8.4 8.4 8.3 8.3 8.3 8.3		MAY 8.3 8.2 8.1 8.1	8.5 8.3 8.2 8.2
1 2 3 4 5 6 7 8 9	8.3 8.3 8.2 8.2 8.2 8.2 8.1 8.3 8.3	8.2 8.2 8.1 8.1 8.1 8.0 8.0 8.0 8.0 8.0	8.2 8.2 8.2 8.1 8.1 8.1 8.1 8.2	7.8 7.9 8.0 8.0	7.8 7.8 7.9 7.9 8.0 8.1 8.1 8.1 8.1	7.8 7.9 7.9 8.0 8.0 8.1 8.1 8.1 8.1	8.6 8.5 8.6 8.5	8.4 8.4 8.4 8.3 8.3 8.3 8.3 8.3	8.5 8.5 8.4 8.4 8.3 8.3 8.3 8.3	8.6 8.4 8.3 8.2 8.3	MAY 8.3 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.0	8.5 8.3 8.2 8.2 8.2 8.1 8.1 8.1 8.1
1 2 3 4 5 6 7 8 9 10 11 12 13 14	8.3 8.2 8.2 8.2 8.2 8.2 8.3 8.3 8.3 8.3	### REBRUARY ### 8.2	8.2 8.2 8.2 8.1 8.1 8.1 8.1 8.2 8.2 8.2	7.8 7.9 8.0 8.1 8.1 8.1 8.1 8.1 8.1	7.8 7.8 7.9 7.9 8.0 8.1 8.1 8.1 8.1 7.7 7.6	7.8 7.9 7.9 8.0 8.1 8.1 8.1 8.1 7.8	8.6 8.5 8.6 8.5 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3	APRIL 8.4 8.4 8.4 8.3 8.2 8.3 8.3 8.3 8.0 8.2 7.9 8.0	8.5 8.5 8.4 8.4 8.3 8.3 8.3 8.3 8.3	8.6 8.4 8.3 8.2 8.3 8.2 8.2 8.2 8.1 8.1 8.2 8.3	MAY 8.3 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.5 8.3 8.2 8.2 8.1 8.1 8.1 8.1 8.1 8.1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	8.3 8.2 8.2 8.2 8.2 8.2 8.3 8.3 8.3 8.3 8.3 7.9 7.9	### REBRUARY ### 8.2 ### 8.1 ### 8.1 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0	8.2 8.2 8.1 8.1 8.1 8.1 8.2 8.2 8.2 8.2 8.1 8.1 7.9 7.9	7.8 7.9 8.0 8.1 8.1 8.1 8.1 8.1 8.1 7.8 7.7 7.8	MARCH 7.8 7.8 7.9 8.0 8.1 8.1 8.1 8.1 7.7 7.6 7.5 7.5 7.5 7.5 7.6	7.8 7.9 7.9 8.0 8.1 8.1 8.1 8.1 7.8 7.7 7.7 7.7 7.6 7.6 7.6 7.7	8.6 8.5 8.6 8.5 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.5 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6	APRIL 8.4 8.4 8.4 8.3 8.2 8.3 8.3 8.0 8.2 7.9 8.0 8.1 8.1 8.0 8.2 8.4 8.4	8.5 8.4 8.4 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3	8.6 8.4 8.3 8.2 8.3 8.2 8.2 8.2 8.2 8.1 8.1 8.2 8.3 8.4 8.5 8.6 8.5 8.6	MAY 8.3 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	8.5 8.3 8.2 8.2 8.1 8.1 8.1 8.1 8.1 8.2 8.3 8.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	8.3 8.2 8.2 8.2 8.2 8.1 8.3 8.3 8.3 8.3 8.7 97.9 7.9 7.9 7.9	### REBRUARY ### 8.2 ### 8.2 ### 8.1 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0 ### 8.0	8.2 8.2 8.1 8.1 8.1 8.1 8.2 8.2 8.2 8.2 8.1 8.0 7.9 7.9 7.9 7.9 7.9 7.9	7.8 7.9 8.0 8.1 8.1 8.1 8.1 8.1 8.1 7.7 7.8 7.6 7.6 7.6 7.8 7.8 7.8	MARCH 7.8 7.8 7.9 8.0 8.1 8.1 8.1 8.1 7.7 7.6 7.6 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.6 7.8	7.8 7.9 8.0 8.0 8.1 8.1 8.1 8.1 7.8 7.7 7.7 7.6 7.6 7.6 7.7 7.8 7.9	8.6 8.5 8.6 8.5 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.4 8.5 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6 8.6	APRIL 8.4 8.4 8.4 8.3 8.2 8.3 8.0 8.2 7.9 8.0 8.1 8.1 8.0 8.2 8.4 8.5 8.6 8.5 8.6	8.5 8.4 8.4 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3	8.6 8.4 8.3 8.2 8.3 8.2 8.2 8.2 8.1 8.1 8.2 8.3 8.4 8.5 8.6 8.5 8.6 8.5	MAY 8.3 8.2 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.2 8.2 8.3 8.2 8.4 8.5 8.4 8.5	8.5 8.3 8.2 8.2 8.1 8.1 8.1 8.1 8.1 8.2 8.3 8.4 8.4 8.4 8.4 8.6 8.5 8.5

07143672 LITTLE ARKANSAS RIVER AT HIGHWAY 50 NEAR HALSTEAD, KS--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

	PH,	WATER,	WHOLE,	FIELD, STA	ANDARD UI	NITS, WATER	YEAR OCTO	DBER 20	00 TO SEP	TEMBER 200	1	
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			JULY			AUGUST			SEPTEMBE	R
1 2	8.0 7.8	7.8 7.8	7.8 7.8	8.3 8.4		8.2 8.2	8.4	8.1	8.3 8.3	8.8 8.8	8.7 8.5	8.8 8.6
3 4	7.9 7.8	7.7 7.7	7.8 7.8	8.5 8.6	8.2	8.4 8.5	8.5 8.6 8.5	8.2	8.3 8.4	8.6 8.6	8.5 8.5	8.6 8.6
5	7.8	7.4	7.7	0.0	0.5	8.4	8.5	8.1	8.3	8.6	8.4	8.5
6 7	7.5 7.7	7.4 7.5	7.4 7.6	8.8 8.7	8.3 8.4	8.5 8.6	8.4 8.7 8.6 8.5 8.7	8.0	8.3 8.5	8.6 8.5	8.4 8.4	8.5 8.4
8 9	7.8 7.3	7.2 7.2	7.7 7.3	9.0 8.9 8.9	0 (8.7 8.8	8.6 8.5 8.7	8.1	8.3 8.3	8 4	8 4	8.4
10	7.3	7.2	7.2	8.9						8.4 8.4	8.3	8.3
11 12	7.3 7.4	7.2 7.2	7.3 7.3	8.8 8.6	8.6 8.5	8.7 8.5	8.8 8.6 8.6 8.5	8.5	8.7 8.6	8.4 8.3	8.3	8.3
13 14	7.5 7.5	7.4	7.4		8.5	8.6 8.6	8.6	8.3	8.5 8.5	8.2 8.2 8.2	8.2	8.2
15	7.6	7.5	7.6	0.0	0.0	8.7	8.5	8.3	8.4		8.2	8.2
16 17	7.8 7.8	7.6 7.8	7.7 7.8	8.8 8.8	8.5 8.6	8.6 8.7	8.7 8.7 8.7 8.9 8.8	8.4 8.5 8.4 8.5 8.4	8.5 8.6	8.2 8.2	8.1	8.2
18 19	7.9 7.7	7.6	7.8 7.5	8.7 8.6 8.5		8.7 8.4 8.4	8.7	8.4	8.5	6.7	6.7 6.6	6.6
20	7.9	7.7	7.9							6.8	6.7	6.7
21 22	7.9 7.0	7.0 7.0	7.3 7.0	8.4	8.2	8.3	8.5 8.5 8.5 8.5	8.4	8.4 8.4	7.0 7.2	6.8 7.0	6.9 7.2
23 24	7.2 7.4	7.0	7.1 7.2	8.3 8.4	8.1	8.2	8.5	8.4	8.4		7.2	7.3
25	7.6	7.4	7.5	8.6	8.2					7.7	7.6	7.7
26 27	7.7 7.8	7.6 7.7	7.7 7.8	8.7 8.7 8.6	8.6	8.6 8.5	8.5 8.4 8.5 8.5 8.7	8.4	8.4	7.8 7.5 7.5 7.6 7.6	7.4 7.4	7.7 7.4
28 29	7.9 8.1	7.8 7.9	7.9 7.9	8.6	8.4 8.4 8.4	8.4	8.4	8.3	8.4	7.5	7.4	7.5
30 31	8.2	8.1	8.1	8.6 8.5 8.4	8.4	8.4 8.4	8.5	8.4	8.4	7.6	7.5	7.6
MAX	8.2	8.1	8.1				8.9		8.8			
MIN	7.0	7.0	7.0			8.2	8.4	8.0	8.3			
		TEMP	ERATURE	, WATER (DE	EG. C), V	NATER YEAR	OCTOBER 20	00 TO	SEPTEMBER	2001		
DAY	MAX	TEMP:	ERATURE MEAN	, WATER (DE		NATER YEAR MEAN	OCTOBER 20	OT 000 MIN		2001 MAX	MIN	MEAN
DAY	MAX		MEAN	MAX		MEAN	MAX		MEAN	MAX	MIN JANUARY	
1	18.4	MIN OCTOBE	MEAN R 17.7	MAX 18.0	MIN NOVEMBER 16.2	MEAN	MAX DE	MIN ECEMBER	MEAN	MAX	JANUARY	.5
1 2 3	18.4 20.0 20.7	MIN OCTOBE	MEAN R 17.7	MAX 18.0	MIN NOVEMBER 16.2 14.6 13.2	MEAN 17.2 15.4 13.9	MAX DE 5.1 4.5 4.3	MIN ECEMBER 4.0 3.9 3.3	MEAN 4.4 4.2 3.7	MAX .7 .3 .7	JANUARY .3 .2 .2	.5 .2 .4
1 2	18.4 20.0	MIN OCTOBE	MEAN R	MAX 18.0	MIN NOVEMBER 16.2 14.6 13.2 12.6	MEAN 17.2 15.4 13.9	MAX DF 5.1 4.5 4.3	MIN ECEMBER 4.0 3.9 3.3	MEAN 4.4 4.2 3.7	MAX .7 .3	JANUARY	.5
1 2 3 4 5	18.4 20.0 20.7 20.2 17.4	MIN OCTOBE 16.6 17.6 18.5 17.4 14.9	MEAN R 17.7 18.7 19.6 18.8 16.5	18.0 16.2 14.6 13.3 13.4	MIN NOVEMBER 16.2 14.6 13.2 12.6 12.7	MEAN 17.2 15.4 13.9	MAX DF 5.1 4.5 4.3	MIN ECEMBER 4.0 3.9 3.3	MEAN 4.4 4.2 3.7	.7 .3 .7 2.0 2.4	JANUARY .3 .2 .2 .6 1.7	.5 .2 .4 1.2 2.0
1 2 3 4 5	18.4 20.0 20.7 20.2 17.4 14.9 12.4 11.7	MIN OCTOBE 16.6 17.6 18.5 17.4 14.9	MEAN R 17.7 18.7 19.6 18.8 16.5	18.0 16.2 14.6 13.3 13.4	MIN NOVEMBER 16.2 14.6 13.2 12.6 12.7 10.7 9.8 7.7	MEAN 17.2 15.4 13.9	MAX DF 5.1 4.5 4.3	MIN ECEMBER 4.0 3.9 3.3	MEAN 4.4 4.2 3.7	.7 .3 .7 2.0 2.4 2.7 3.0 2.7	JANUARY .3 .2 .2 .6 1.7 1.7 1.9 1.6	.5 .2 .4 1.2 2.0 2.2 2.5 2.3
1 2 3 4 5	18.4 20.0 20.7 20.2 17.4 14.9 12.4	MIN OCTOBE 16.6 17.6 18.5 17.4 14.9	MEAN R 17.7	18.0 16.2 14.6 13.3 13.4	MIN NOVEMBER 16.2 14.6 13.2 12.6 12.7 10.7 9.8 7.7	MEAN 17.2 15.4 13.9	MAX DF 5.1 4.5 4.3	MIN ECEMBER 4.0 3.9 3.3	MEAN 4.4 4.2 3.7	.7 .3 .7 2.0 2.4 2.7 3.0	JANUARY .3 .2 .2 .6 1.7 1.7	.5 .2 .4 1.2 2.0 2.2 2.5
1 2 3 4 5 6 7 8 9 10	18.4 20.0 20.7 20.2 17.4 14.9 12.4 11.7 11.1 11.4	MIN OCTOBE 16.6 17.6 18.5 17.4 14.9 11.6 10.5 9.8 9.3 9.3	MEAN R 17.7 18.7 19.6 18.8 16.5 13.1 11.4 10.6 10.0 10.2	18.0 16.2 14.6 13.3 13.4 13.2 10.7 9.8 7.7 6.9	MIN NOVEMBER 16.2 14.6 13.2 12.6 12.7 10.7 9.8 7.7 6.2 5.4	MEAN 17.2 15.4 13.9 12.9 13.1 12.0 10.2 8.5 7.0 6.3 6.1	MAX DE 5.1 4.5 4.3 4.3 4.2 4.4 4.8 5.3 4.9 4.8	MIN 4.0 3.9 3.3 3.1 3.4 3.6 3.4 4.7 4.0 2.5	4.4 4.2 3.7 3.7 3.7 4.0 4.0 5.0 4.5 4.1	MAX .7 .3 .7 2.0 2.4 2.7 3.0 2.7 2.6 3.5 3.6	JANUARY .3 .2 .2 .6 .6 1.7 1.7 1.9 1.6 1.3 1.8 2.9	.5 .2 .4 1.2 2.0 2.2 2.5 2.3 2.1 2.7
1 2 3 4 5 6 7 8 9 10	18.4 20.0 20.7 20.2 17.4 14.9 12.4 11.7 11.1 11.4 12.8 15.2 16.1	MIN OCTOBE 16.6 17.6 18.5 17.4 14.9 11.6 10.5 9.8 9.3 9.3 9.3	MEAN R 17.7 18.7 19.6 18.8 16.5 13.1 11.4 10.6 10.0 10.2	18.0 16.2 14.6 13.3 13.4 13.2 10.7 9.8 7.7 6.9 6.5 6.3	MIN NOVEMBER 16.2 14.6 13.2 12.6 12.7 10.7 9.8 7.7 6.2 5.4 5.6 5.0 3.6	MEAN 17.2 15.4 13.9 12.9 13.1 12.0 10.2 8.5 7.0 6.3 6.1 5.8 4.4	MAX DE 5.1 4.5 4.3 4.3 4.2 4.4 4.8 5.3 4.9 4.8 2.5 .9	MIN ECEMBER 4.0 3.9 3.3 3.1 3.4 3.6 3.4 4.7 4.0 2.5	4.4 4.2 3.7 3.7 3.7 4.0 4.0 5.0 4.5 4.1	.7 .3 .7 2.0 2.4 2.7 3.0 2.7 2.6 3.5 3.6 4.0 4.1	JANUARY .3 .2 .2 .6 1.7 1.7 1.9 1.6 1.3 1.8 2.9 1.8 3.4	.5 .2 .4 1.2 2.0 2.5 2.3 2.1 2.7 3.3 2.8 3.8
1 2 3 4 5 6 7 8 9 10	18.4 20.0 20.7 20.2 17.4 14.9 12.4 11.7 11.1 11.4	MIN OCTOBE: 16.6 17.6 18.5 17.4 14.9 11.6 10.5 9.3 9.3 9.3	MEAN R 17.7 19.6 18.8 16.5 13.1 11.4 10.6 10.0 10.2 11.4 13.7	18.0 16.2 14.6 13.3 13.4 13.2 10.7 9.8 7.7 6.9 6.5 6.3	MIN NOVEMBER 16.2 14.6 13.2 12.6 12.7 10.7 9.8 7.7 6.2 5.4	MEAN 17.2 15.4 13.9 12.9 13.1 12.0 10.2 8.5 7.0 6.3 6.1 5.8	MAX DF 5.1 4.5 4.3 4.3 4.2 4.4 4.8 5.3 4.9 4.8 2.5 .9	MIN ECEMBER 4.0 3.9 3.3 3.1 3.4 4.7 4.0 2.5	4.4 4.2 3.7 3.7 3.7 4.0 4.0 5.0 4.5 4.1	.7 .3 .7 2.0 2.4 2.7 3.0 2.7 2.6 3.5	JANUARY .3 .2 .2 .6 1.7 1.7 1.9 1.6 1.3 1.8 2.9 1.8	.5 .2 .4 1.2 2.0 2.2 2.5 2.3 2.1 2.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	18.4 20.0 20.7 20.2 17.4 14.9 12.4 11.1 11.4 12.8 15.2 16.1 17.1 17.6	MIN OCTOBE: 16.6 17.6 18.5 17.4 14.9 11.6 10.5 9.8 9.3 9.3 10.1 12.3 15.8 16.4	MEAN 17.7 18.7 19.6 18.8 16.5 13.1 11.4 10.6 10.0 10.2 11.4 13.7 15.5 16.3 16.9	18.0 16.2 14.6 13.3 13.4 13.2 10.7 9.8 7.7 6.9 6.5 6.3 5.0 5.2 6.3	MIN NOVEMBER 16.2 14.6 13.2 12.6 12.7 10.7 9.8 7.7 6.2 5.4 5.6 3.5 4.5	MEAN 17.2 15.4 13.9 12.9 13.1 12.0 10.2 8.5 7.0 6.3 6.1 5.8 4.4 4.4 5.4 4.8	MAX DE 5.1 4.5 4.3 4.3 4.2 4.4 4.8 5.3 4.9 4.8 2.5 .9 .6 1.1 1.4	MIN ECEMBER 4.0 3.9 3.3 3.1 3.4 3.6 3.4 4.7 4.0 2.5 .1 .1 .2 .3 .3 .1	4.4 4.2 3.7 3.7 3.7 4.0 4.0 5.0 4.5 4.1 .9 .4 .4 .6	MAX .7 .3 .7 2.0 2.4 2.7 3.0 2.7 2.6 3.5 3.6 4.0 4.1 3.9 3.5	JANUARY .3 .2 .2 .6 1.7 1.7 1.9 1.6 1.3 1.8 2.9 1.8 2.7 1.8	.5 .2 .4 1.2 2.0 2.2 2.5 2.3 2.1 2.7 3.3 2.8 3.8 3.3 2.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	18.4 20.0 20.7 20.2 17.4 14.9 12.4 11.7 11.1 11.4 12.8 15.2 16.1 17.1 17.6 17.4 17.1	MIN OCTOBE: 16.6 17.6 18.5 17.4 14.9 11.6 10.5 9.8 9.3 10.1 12.3 15.0 15.8 16.4	MEAN R 17.7 19.6 18.8 16.5 13.1 11.4 10.6 10.0 10.2 11.4 13.7 15.5 16.3 16.9 16.9 16.9 17.1	18.0 16.2 14.6 13.3 13.4 13.2 10.7 9.8 7.7 6.9 6.5 6.3 5.0 5.2 6.3	MIN NOVEMBER 16.2 14.6 13.2 12.7 10.7 9.8 7.7 6.2 5.4 5.6 3.5 4.5 3.8 2.7 3.8	MEAN 17.2 15.4 13.9 12.9 13.1 12.0 10.2 8.5 7.0 6.3 6.1 5.8 4.4 4.4 5.4 4.8 3.5 4.1	MAX DE 5.1 4.5 4.3 4.3 4.2 4.4 4.8 5.3 4.9 4.8 2.5 6 1.1 1.4 .7 .5	MIN ECEMBER 4.0 3.9 3.3 3.1 3.4 3.6 3.4 4.7 4.0 2.5 .1 .1 .2 .3 .3 .1	4.4 4.2 3.7 3.7 3.7 4.0 4.0 5.0 4.5 4.1 .9 .4 .4 .4 .6	MAX .7 .3 .7 2.0 2.4 2.7 3.0 2.7 2.6 3.5 3.6 4.0 4.1 3.9 3.5 3.3 2.4 2.0	JANUARY .3 .2 .2 .6 1.7 1.7 1.9 1.6 1.3 1.8 2.9 1.8 3.4 2.7 1.8 2.0 1.7 .5	.5 .2 .4 1.2 2.0 2.2 2.5 2.3 2.1 2.7 3.3 2.8 3.8 3.3 2.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	18.4 20.0 20.7 20.2 17.4 14.9 12.4 11.7 11.1 11.4 12.8 15.2 16.1 17.1	MIN OCTOBE: 16.6 17.6 18.5 17.4 14.9 11.6 10.5 9.8 9.3 9.3 15.0 12.3 15.0 15.8 16.4	MEAN R 17.7 19.6 18.8 16.5 13.1 11.4 10.6 10.0 10.2 11.4 13.7 15.5 16.3 16.9 16.9	18.0 16.2 14.6 13.3 13.4 13.2 10.7 9.8 7.7 6.9 6.5 6.3 5.0 5.2 6.3	MIN NOVEMBER 16.2 14.6 13.2 12.6 12.7 10.7 9.8 7.7 6.2 5.4 5.6 6.0 3.6 3.5 4.5	MEAN 17.2 15.4 13.9 12.9 13.1 12.0 10.2 8.5 7.0 6.3 6.1 5.8 4.4 4.4 4.4 5.4 4.8 3.5	MAX DF 5.1 4.5 4.3 4.3 4.2 4.4 4.8 5.3 4.9 4.8 2.5 .9 .5 .6 1.1 1.4 .7	MIN ECEMBER 4.0 3.9 3.1 3.1 3.4 3.6 3.4 4.7 4.0 2.5 .1 .2 2.3 3.3 .1 .1	4.4 4.2 3.7 3.7 3.7 4.0 4.0 5.0 4.5 4.1 .9 .4 .4 .6	MAX .7 .3 .7 2.0 2.4 2.7 3.0 2.7 2.6 3.5 3.6 4.0 4.1 3.9 3.5 3.3 2.4	JANUARY .3 .2 .2 .6 1.7 1.7 1.9 1.6 1.3 1.8 2.9 1.8 3.4 2.7 1.8 2.0 1.7	.5 .2 .4 1.2 2.0 2.2 2.5 2.3 2.1 2.7 3.3 2.8 3.8 3.3 2.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	18.4 20.0 20.7 20.2 17.4 14.9 12.4 11.1 11.4 12.8 15.2 16.1 17.1 17.6 17.4 17.1 17.7 17.8 17.7	MIN OCTOBE 16.6 17.6 18.5 17.4 14.9 11.6 10.5 9.8 9.3 9.3 10.1 12.3 15.0 15.8 16.4 16.2 15.6 16.2 16.3 16.1	MEAN R 17.7 18.7 19.6 18.8 16.5 13.1 11.4 10.6 10.0 10.2 11.4 13.5 16.3 16.9 16.9 16.9 17.1 17.1	18.0 16.2 14.6 13.3 13.4 13.2 10.7 9.8 7.7 6.9 6.5 6.3 5.3 5.9 4.1 4.5 5.1 4.6	MIN NOVEMBER 16.2 14.6 13.2 12.6 12.7 10.7 9.8 7.7 6.2 5.4 5.6 5.6 3.5 4.5 3.8 2.7 3.8 2.7 3.6	MEAN 17.2 15.4 13.9 12.9 13.1 12.0 10.2 8.5 7.0 6.3 6.1 5.8 4.4 4.4 5.4 4.8 3.5 4.1 4.5 4.1 3.8	MAX DE 5.1 4.5 4.3 4.2 4.4 4.8 5.3 4.9 4.8 2.5 .6 1.1 1.4 .7 .55 .6 .6	MIN ECEMBER 4.0 3.9 3.3 3.1 3.4 3.6 3.4 4.7 4.0 2.5 .1 .1 .2 .3 .3 .1 .1 .2 .2 .2 .2	4.4 4.2 3.7 3.7 3.7 4.0 4.0 5.0 4.5 4.1 .9 .4 .4 .4 .6	MAX .7 .3 .7 2.0 2.4 2.7 3.0 2.7 2.6 3.5 3.6 4.0 4.1 3.9 3.5 3.3 2.4 2.0 1.9 .9	JANUARY .3 .2 .6 1.7 1.7 1.9 1.6 1.3 1.8 2.9 1.8 2.7 1.8 2.0 1.7 .5 .3 .1	.5 .2 .4 1.2 2.0 2.2 2.5 2.3 2.1 2.7 3.3 2.8 3.8 3.3 2.8 2.1 1.0 5.5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	18.4 20.0 20.7 20.2 17.4 14.9 12.4 11.7 11.1 11.4 15.2 16.1 17.6 17.4 17.7 17.8 17.7 17.8 17.7	MIN OCTOBE 16.6 17.6 18.5 17.4 14.9 11.6 10.5 9.8 9.3 10.1 12.3 15.0 15.8 16.4 16.2 16.3 16.1 16.5	MEAN R 17.7 19.6 18.8 16.5 13.1 11.4 10.6 10.0 10.2 11.4 13.7 15.5 16.3 16.9 16.9 17.1 17.3 17.1 17.1 17.8	MAX 18.0 16.2 14.6 13.3 13.4 13.2 10.7 9.8 7.7 6.9 6.5 6.3 5.0 5.2 6.3 5.9 4.5 5.1 4.6 4.6 4.8 5.7	MIN NOVEMBER 16.2 14.6 13.2 12.7 10.7 9.8 7.7 6.2 5.4 5.6 3.5 4.5 3.7 3.8 2.7 3.5 3.7 3.6	MEAN 17.2 15.4 13.9 12.9 13.1 12.0 10.2 8.5 7.0 6.3 6.1 5.8 4.4 4.4 5.4 4.8 3.5 4.1 4.5 4.1 3.8 4.4 4.9	MAX DE 5.1 4.5 4.3 4.2 4.4 4.8 5.3 4.9 4.8 2.5 .6 1.1 1.4 .7 .5 .6 .6 .6 .6 .6	MIN ECEMBER 4.0 3.9 3.3 3.1 3.4 3.6 3.4 4.7 4.0 2.5 .1 .1 .2 .3 .3 .1 .1 .2 .2 .2 .2 .2	MEAN 4.4 4.2 3.7 3.7 3.7 4.0 4.0 5.0 4.5 4.1 .9 .4 .4 .4 .6 1.0 .3 .3 .3 .3 .4	MAX .7 .3 .7 2.0 2.4 2.7 3.0 2.7 2.6 3.5 3.6 4.0 4.1 3.9 3.5 3.3 2.4 2.0 1.9 .9	JANUARY .3 .2 .2 .6 1.7 1.7 1.9 1.6 1.3 1.8 2.9 1.8 3.4 2.7 1.8 2.0 1.7 .55 .3 .1 .6 1.2 2.4	.5 .2 .4 1.2 2.0 2.2 2.5 2.3 2.1 2.7 3.3 2.8 3.8 3.3 2.8 2.4 2.1 1.3 1.0 5.5 5.5 1.3 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	18.4 20.0 20.7 20.2 17.4 14.9 12.4 11.7 11.1 11.4 12.8 15.2 16.1 17.1 17.6 17.1 17.7 17.8 17.7	MIN OCTOBE: 16.6 17.6 18.5 17.4 14.9 11.6 10.5 9.8 9.3 9.3 15.0 15.8 16.4 16.2 16.2 16.3 16.1 16.9 16.5	MEAN R 17.7 19.6 18.8 16.5 13.1 11.4 10.6 10.0 10.2 11.4 13.7 15.5 16.3 16.9 16.9 17.1 17.1 17.1 17.1	18.0 16.2 14.6 13.3 13.4 13.2 10.7 9.8 7.7 6.9 6.5 6.3 5.0 5.2 6.3 5.1 4.5 5.1 4.6 4.6 4.8	MIN NOVEMBER 16.2 14.6 13.2 12.6 12.7 10.7 9.8 7.7 6.2 5.4 5.6 6.3 5.5 4.5 3.8 2.7 3.5 3.7 3.6 4.5	MEAN 17.2 15.4 13.9 12.9 13.1 12.0 10.2 8.5 7.0 6.3 6.1 5.8 4.4 4.5 4.1 4.8 3.5 4.1 4.5 4.1 3.8 4.4	MAX DE 5.1 4.5 4.3 4.2 4.4 4.8 5.3 4.9 4.8 2.5 .6 1.1 1.4 .7 .5 .6 .6 .6 .5	MIN ECEMBER 4.0 3.9 3.3 3.1 3.4 3.6 3.4 4.7 4.0 2.5 .1 .1 .2 2.3 3.3 .1 .1 .2 2.2 .2 .2 .1	4.4 4.2 3.7 3.7 3.7 4.0 4.0 5.0 4.5 4.1 .9 .4 .4 .4 .6 1.0 .3 .3 .3 .3	MAX .7 .3 .7 2.0 2.4 2.7 3.0 2.7 2.6 3.5 3.6 4.0 4.1 3.9 3.5 3.3 2.4 2.0 1.9 .9	JANUARY .3 .2 .2 .6 1.7 1.7 1.9 1.6 1.3 1.8 2.9 1.8 3.4 2.7 1.8 2.0 1.7 .5 .3 .1 .6 1.2	.5 .2 .4 1.2 2.0 2.2 2.5 2.3 2.1 2.7 3.3 2.8 3.3 2.8 2.4 2.1 1.3 1.0 5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	18.4 20.0 20.7 20.2 17.4 14.9 12.4 11.7 11.1 11.4 12.8 15.2 16.1 17.1 17.6 17.4 17.7 17.8 17.7 17.8 17.7 17.5 17.1 17.9 18.3 18.0 16.6	MIN OCTOBE 16.6 17.6 18.5 17.4 14.9 11.6 10.5 9.8 9.3 9.3 10.1 12.3 15.0 15.8 16.4 16.2 16.3 16.1 16.9 16.5 16.9 17.7 16.2 16.0	MEAN R 17.7 19.6 18.8 16.5 13.1 11.4 10.6 10.0 10.2 11.4 13.7 15.5 16.3 16.9 16.9 16.5 17.1 17.1 16.8 17.5 18.0 16.9 16.9	MAX 18.0 16.2 14.6 13.3 13.4 13.2 10.7 9.8 7.7 6.9 6.5 6.3 5.0 5.2 6.3 5.9 4.1 4.6 4.6 4.8 5.7 5.6 5.7	MIN NOVEMBER 16.2 14.6 13.2 12.7 10.7 9.8 7.7 6.2 5.4 5.6 5.0 3.5 4.5 3.8 2.7 3.5 3.7 3.6 2.8 4.1 4.4 4.4	MEAN 17.2 15.4 13.9 12.9 13.1 12.0 10.2 8.5 7.0 6.3 6.1 5.8 4.4 4.4 5.4 4.8 3.5 4.1 4.5 4.1 3.8 4.4 4.9 5.4 5.1	MAX DE 5.1 4.5 4.3 4.2 4.4 4.8 5.3 4.9 4.8 2.5 6 1.1 1.4 7 .55 .6 .6 .5 .6 .3 .4	MIN ECEMBER 4.0 3.9 3.3 3.1 3.4 4.7 4.0 2.5 .1 .1 .2 .3 .3 .1 .1 .2 .2 .2 .2 .2 .2	MEAN 4.4 4.2 3.7 3.7 3.7 4.0 4.0 5.0 4.5 4.1 .9 .4 .4 .4 .6 1.0 .3 .3 .3 .3 .4 .3 .2 .3	MAX .7 .3 .7 2.0 2.4 2.7 2.6 3.5 3.6 4.0 4.1 3.9 3.5 3.3 2.4 2.0 1.9 .9 2.4 2.8 3.1 3.3 3.1	JANUARY .3 .2 .2 .6 1.7 1.7 1.9 1.6 1.3 1.8 2.9 1.8 2.7 1.8 2.0 1.7 .5 .3 .1 .6 1.2 2.4 2.5 1.5	.5 .2 .4 1.2 2.0 2.2 2.5 2.3 2.1 2.7 3.3 2.8 3.8 3.3 2.8 2.1 1.0 5 1.6 2.1 2.1 2.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	18.4 20.0 20.7 20.2 17.4 14.9 12.4 11.7 11.1 11.4 12.8 15.2 16.1 17.6 17.6 17.7 17.5 17.7 17.5 17.5 17.1 17.9 18.3 18.0 16.6 17.0 17.9	MIN OCTOBE 16.6 17.6 18.5 17.4 14.9 11.6 10.5 9.8 9.3 10.1 12.3 15.0 15.8 16.4 16.2 16.3 16.1 16.9 17.7 16.2 16.9	MEAN R 17.7 19.6 18.8 16.5 13.1 11.4 10.6 10.0 10.2 11.4 13.7 15.5 16.3 16.9 16.9 17.1 17.1 17.1 16.8 17.5 18.0 16.9 16.3	18.0 16.2 14.6 13.3 13.4 13.2 10.7 9.8 7.7 6.9 6.5 6.5 6.5 5.0 5.2 6.3 5.9 4.5 5.1 4.6 4.6 4.8 5.7 5.7 5.7 5.6	MIN NOVEMBER 16.2 14.6 13.2 12.6 7 10.7 9.8 7.7 6.2 5.4 4.5 3.5 3.7 3.6 2.8 4.1 4.4 4.7 7 5.9	MEAN 17.2 15.4 13.9 12.9 13.1 12.0 10.2 8.5 7.0 6.3 6.1 5.8 4.4 4.4 5.4 4.8 3.5 4.1 4.5 4.1 3.8 4.4 5.1 5.1 5.3 6.3	MAX DE 5.1 4.5 4.3 4.2 4.4 4.8 5.3 4.9 4.8 2.5 .6 1.1 1.4 .7 .5 .6 .6 .6 .6 .3 .4 .8	MIN ECEMBER 4.0 3.9 3.3 3.1 3.4 3.6 3.4 4.7 4.0 2.5 .1 .1 .2 .3 .3 .1 .1 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2	MEAN 4.4 4.2 3.7 3.7 4.0 4.0 5.0 4.5 4.1 .9 .4 .4 .4 .4 .3 .3 .3 .3 .4 .3 .4 .3 .2	MAX .7 .3 .7 2.0 2.4 2.7 3.0 2.7 2.6 3.5 3.6 4.0 4.1 3.9 3.5 3.3 2.4 2.0 1.9 .9 2.4 2.8 3.1 3.3 3.1 4.1 3.3 3.3	JANUARY .3 .2 .2 .6 1.7 1.7 1.9 1.6 1.3 1.8 2.9 1.8 3.4 2.7 1.8 2.0 1.7 .5 .3 .1 .6 1.2 2.4 2.5 1.5 3.1 1.7	.5 .2 .4 1.2 2.0 2.2 2.5 2.3 2.1 2.7 3.3 2.8 3.8 3.8 3.3 2.8 2.1 1.3 1.3 1.0 5 1.6 2.1 2.1 2.1 2.1 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	18.4 20.0 20.7 20.2 17.4 14.9 12.8 15.2 16.1 17.1 17.6 17.4 17.1 17.7 17.8 17.7 17.5 17.1 17.9 18.3 18.0	MIN OCTOBE 16.6 17.6 18.5 17.4 14.9 11.6 10.5 9.8 9.3 15.0 15.8 16.4 16.2 16.3 16.1 16.9 17.7 16.2 16.0 16.4 16.9 17.4 16.9 17.4 16.1	MEAN R 17.7 19.6 18.8 16.5 13.1 11.4 10.6 10.0 10.2 11.4 13.7 15.5 16.3 17.1 17.1 17.1 16.8 17.5 18.0 16.9 16.9 16.9 16.9 17.3 17.1 17.1 17.1 17.1 17.1 16.8 17.5 18.0 16.9	18.0 16.2 14.6 13.3 13.4 13.2 10.7 9.8 7.7 6.9 6.5 6.3 5.0 5.0 5.2 6.3 5.1 4.5 5.1 4.6 4.8 5.7 5.7 5.7 5.7 5.7 5.7 6.9	MIN NOVEMBER 16.2 14.6 13.2 12.6 12.7 10.7 9.8 7.7 6.2 5.4 5.6 5.0 3.6 3.5 5.7 3.5 3.5 3.5 3.5 3.7 3.6 2.8 4.1 4.4 4.7 5.9 5.1 14.3	MEAN 17.2 15.4 13.9 12.9 13.1 12.0 10.2 8.5 7.0 6.3 6.1 5.8 4.4 4.5 4.1 3.8 4.4 4.5 4.1 3.8 4.4 4.9 5.1 5.1 5.1 5.3 6.3 6.3 6.4 8	MAX DE 5.1 4.5 4.3 4.2 4.4 4.8 5.3 4.9 4.8 2.5 6.6 1.1 1.4 7.5 6.6 6.6 6.3 4.8 8.9	MIN ECEMBER 4.0 3.9 3.1 3.4 3.6 3.4 4.7 4.0 2.5 .1 .1 .2 2.2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2	4.4 4.2 3.7 3.7 4.0 4.0 5.0 4.5 4.1 .9 .4 .4 .4 .4 .4 .4 .4 .4 .6 1.0 .3 .3 .3 .4 .3 .3 .4 .3 .4 .3 .7 .7	MAX .7 .3 .7 2.0 2.4 2.7 3.0 2.7 2.6 3.5 3.6 4.0 4.1 3.9 3.5 3.3 2.4 2.0 1.9 .9 2.4 2.8 3.1 3.3 3.1 4.1 3.3 3.3 3.3 4.4	JANUARY .3 .2 .6 1.7 1.7 1.9 1.6 1.3 1.8 2.9 1.8 2.7 1.8 2.0 1.7 .5 3.1 .6 1.2 2.4 1.5 3.1 1.7 1.9 2.5 2.5	.5 .2 .4 1.2 2.0 2.2 2.5 2.3 2.1 2.7 3.3 2.8 3.8 3.3 2.8 2.4 2.1 1.3 1.0 5 1.6 2.1 2.8 3.6 2.1 2.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	18.4 20.0 20.7 20.2 17.4 14.9 12.4 11.7 11.1 11.4 12.8 15.2 16.1 17.1 17.6 17.4 17.7 17.8 17.7 17.8 17.7 17.8 17.7 17.8 17.7 17.5 17.1 17.9 18.3 18.0	MIN OCTOBE 16.6 17.6 18.5 17.4 14.9 11.6 10.5 9.8 9.3 10.1 12.3 15.0 15.8 16.4 16.2 16.3 16.1 16.9 16.5 16.9 17.7 16.2 16.0 16.4 16.9 17.7 16.2	MEAN R 17.7 19.6 18.8 16.5 13.1 11.4 10.6 10.0 10.2 11.4 13.7 15.5 16.3 16.9 16.9 16.9 16.5 17.1 17.1 17.1 16.8 17.5 18.0 16.9	18.0 16.2 14.6 13.3 13.4 13.2 10.7 9.8 7.7 6.9 6.5 6.5 5.0 5.2 6.3 5.9 4.1 4.6 4.8 5.7 5.7 5.6	MIN NOVEMBER 16.2 14.6 13.2 12.6 12.7 10.7 9.8 7.7 6.2 5.4 5.6 5.0 3.6 3.5 4.5 3.7 3.6 2.8 4.1 4.4 4.7 5.2 4.4 4.7 5.9 5.1	MEAN 17.2 15.4 13.9 12.9 13.1 12.0 10.2 8.5 7.0 6.3 6.1 5.8 4.4 4.4 5.4 4.8 3.5 4.1 4.5 4.1 3.8 4.4 4.9 5.4 5.1 5.1 5.3 6.3 5.6	MAX DE 5.1 4.5 4.3 4.3 4.2 4.4 4.8 5.3 4.9 4.8 2.5 66 1.1 1.4 7.5 66 65 66 66 63 45 88 88	MIN ECEMBER 4.0 3.9 3.3 3.1 3.4 4.7 4.0 2.5 .1 .1 .2 .3 .3 .1 .1 .2 .2 .2 .2 .2 .2 .2 .2 .3 .6	MEAN 4.4 4.2 3.7 3.7 3.7 4.0 4.0 5.0 4.5 4.1 .9 .4 .4 .4 .6 1.0 .3 .3 .3 .3 .4 .3 .2 .3 .4 .3 .2	MAX .7 .3 .7 2.0 2.4 2.7 2.6 3.5 3.6 4.1 3.9 3.5 3.3 2.4 2.0 1.9 .9 2.4 2.8 3.1 3.3 3.1 4.1 3.3 3.3	JANUARY .3 .2 .2 .6 1.7 1.7 1.9 1.6 1.3 1.8 2.9 1.8 2.7 1.8 2.0 1.7 .5 .3 .1 .6 1.2 2.4 2.5 1.5 3.1 1.7 1.9 2.5	.5 .2 .4 1.2 2.0 2.2 2.5 2.3 2.1 2.7 3.3 2.8 3.8 3.3 2.8 2.4 2.1 1.0 5 1.6 2.1 2.3 2.3 2.3 2.3 3.3 3.3 3.3 3.3 3.3 3.3

> 07143672 LITTLE ARKANSAS RIVER AT HIGHWAY 50 NEAR HALSTEAD, KS--Continued TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		TEME	RAIORE,	WAIER (DEC	5. C), W	AIEK IEAK	OCTOBER	2000 10	SEF LEMBEN	. 2001		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	4.2 3.0 2.6 3.5 4.9	2.5 .6 1.1 .8 1.6	3.3 1.8 1.8 2.2 3.2	1.1 2.5 4.4 4.8 4.4	.6 1.0 2.2 3.5 3.9	.8 1.7 3.2 4.2 4.2	12.8 12.4 14.3 13.9 14.9	11.9 12.6	11.5 12.9 13.2	22.2 21.5 20.7 19.9 21.7	17.9 18.7 19.1 18.7 18.1	20.0 20.0 19.8 19.3
6 7 8 9 10		3.1 3.3 3.2 .4 .5			3.8 4.1 3.9 5.1 6.4	4.2 4.3 4.9 6.3 7.8	16.5 18.7 20.0 20.7 19.1	14.5 14.9 15.6 17.2 17.7	15.6 16.5 17.6 18.7 18.4	22.2 21.7 21.8 22.8 23.6	17.3 18.2 17.9 18.2 19.7	19.8 20.1 19.9 20.5 21.7
11 12 13 14 15	3.1 2.7 3.2 2.9 1.2	.5 1.5 2.1 .9	1.9 2.2 2.6 2.3				18.7 16.6 16.7 16.5 17.6			23.6 23.5 24.4 24.6 25.3		22.3 22.1 22.5 22.9 23.4
16 17 18 19 20	.8	.0 .0 .3 1.4	.2 .2 .4 1.6 2.8	7.3 6.3 6.6 7.1 8.4			16.2 15.8 16.0 16.2 18.5			26.3 26.0 23.5 23.5 23.2		24.4 24.2 22.6 22.7 22.3
21 22 23 24 25	2.7 2.0 1.6 3.5 3.9	.7 .0 1.1 1.6 2.8	1.9 .9 1.3 2.5 3.5	9.9 11.7 13.1 12.2 10.0	8.1 9.5 10.8 10.0 8.5	9.0 10.5 11.7 11.2 9.6	20.9 20.0 18.7 18.4 19.5	16.6 18.2 15.2 14.2 14.8	18.6 18.8 17.1 16.4 17.1	21.9 19.5 20.5 19.5 18.0	17.2 16.6 16.1	19.7 18.5 18.7 17.0 16.2
26 27 28 29 30 31	3.8 3.7 1.8 	3.2 1.8 .7 	3.6 3.1 1.0 		7.7 7.9 7.2 7.0 8.4 10.3	8.6 8.4 7.8 8.4 10.4 11.5	20.4 21.1 21.2 21.4 20.4	15.9 16.9 17.5 17.8 17.8	18.1 19.0 19.5 19.7 19.0	20.2 20.1 22.2 22.1 20.3 20.0	16.0 17.9 17.5 19.4 18.9 17.6	18.0 18.8 19.7 20.5 19.6 18.3
MONTH	7.6	.0	2.3	13.1	.6	7.1	21.4	10.2	16.2	26.3	14.5	20.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN		MIN AUGUST	MEAN		MIN SEPTEMBE	
DAY 1 2 3 4 5	MAX 18.8 20.1 19.6 19.6 20.3		MEAN 17.9 18.9 18.8 18.3 19.6	MAX 27.8 28.0 28.8 29.6 28.9	JULY			AUGUST 27.6 28.1 28.5 27.8	29.0 29.5 29.8 29.3	25.8 26.3 27.2 27.5	23.7 23.6 24.8 25.3	24.9 25.1 26.1 26.3
1 2 3 4 5	18.8 20.1 19.6 19.6	JUNE 16.8 17.8 18.0 17.3 18.8	17.9 18.9 18.8 18.3	27.8 28.0 28.8	JULY 23.2 24.0 24.4 25.0 25.7	25.4 25.9 26.5 27.3 26.8	29.9 30.5 31.1 30.4	AUGUST 27.6 28.1 28.5 27.8	29.0 29.5 29.8 29.3	25.8 26.3 27.2 27.5	23.7 23.6 24.8 25.3	24.9 25.1 26.1 26.3 25.6 24.8 24.1 23.0
1 2 3 4 5 6 7 8 9 10	18.8 20.1 19.6 19.6 20.3 24.2 24.9 23.5 21.4 24.2 25.7 26.4	JUNE 16.8 17.8 18.0 17.3 18.8 19.7 22.4 18.9 19.6 21.1 24.0 25.5	17.9 18.9 18.8 18.3 19.6 21.5 23.5 20.5 20.4 22.7 24.5 26.0	27.8 28.0 28.8 29.6 28.9	JULY 23.2 24.0 24.4 25.0 25.7 25.3 25.4 26.1 26.3 26.7 27.2 27.4	25.4 25.9 26.5 27.3 26.8 27.5 27.7 28.3 28.7	29.9 30.5 31.1 30.4 31.0 31.3 30.5 30.0 30.7 28.4 26.1 27.9	27.6 28.1 28.5 27.8 28.0 28.4 27.8 27.6 27.4 26.0	29.0 29.5 29.8 29.3 29.6 29.8 29.2 28.9 28.9 28.8 27.4	25.8 26.3 27.2 27.5 26.2 25.5 24.7 24.3 22.6 21.7	23.7 23.6 24.8 25.3 24.9 24.4 23.5 22.0 20.4 19.6	24.9 25.1 26.1 26.3 25.6 24.8 24.1 23.0 21.6 20.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14	18.8 20.1 19.6 19.6 20.3 24.2 24.9 23.5 21.4 24.2 25.7 26.4 26.3 25.9	JUNE 16.8 17.8 18.0 17.3 18.8 19.7 22.4 18.9 19.6 21.1 24.0 25.5 25.0 23.6	17.9 18.9 18.8 18.3 19.6 21.5 23.5 20.5 20.4 22.7 24.5 26.0 25.7 24.7	27.8 28.0 28.8 29.6 28.9 29.4 29.4 29.3 30.2 30.3 30.6 30.1 29.0 27.6	JULY 23.2 24.0 24.4 25.0 25.7 25.3 25.4 26.1 26.3 26.7 27.2 27.4 26.6 25.2	25.4 25.9 26.5 27.3 26.8 27.5 27.7 28.3 28.7 29.1 28.8 27.6 26.5	29.9 30.5 31.1 30.4 31.0 31.3 30.5 30.7 28.4 26.1 27.9 28.6 27.9	AUGUST 27.6 28.1 28.5 27.8 28.0 28.4 27.8 27.6 27.4 26.0 24.6 24.5 25.8	29.0 29.5 29.8 29.3 29.6 29.8 29.2 28.8 27.4 25.4 26.2 27.2	25.8 26.3 27.2 27.5 26.2 25.5 24.7 24.3 22.6 21.7 22.0 23.1 23.9 23.8	23.7 23.6 24.8 25.3 24.9 24.4 23.5 22.0 20.4 19.6 20.1 20.6 21.7 22.0	24.9 25.1 26.1 26.3 25.6 24.8 24.1 23.0 21.6 20.8 21.0 21.9 22.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	18.8 20.1 19.6 19.6 20.3 24.2 24.9 23.5 21.4 24.2 25.7 26.4 26.3 25.9 24.5	JUNE 16.8 17.8 18.0 17.3 18.8 19.7 22.4 18.9 19.6 21.1 24.0 25.5 25.0 23.6 22.2 22.0 22.2 22.8 23.5	17.9 18.9 18.8 18.3 19.6 21.5 20.5 20.4 22.7 24.5 26.0 25.7 24.7 23.3 24.0 23.3 24.0 23.8 24.0	27.8 28.0 28.8 29.6 28.9 29.4 29.4 29.3 30.2 30.3 30.6 30.1 27.6 27.0 28.5 29.8 30.5 30.1	JULY 23.2 24.0 24.4 25.0 25.7 25.3 26.1 26.3 26.7 27.2 27.4 26.6 25.2 24.6 24.5 25.7 27.7	25.4 25.9 26.5 27.3 26.8 27.3 27.5 27.7 28.3 28.7 29.1 28.8 27.6 26.5 25.7 26.3 27.9 28.9 28.6	29.9 30.5 31.1 30.4 31.0 31.3 30.5 30.7 28.4 26.1 27.9 27.7 27.9 26.6 28.2 26.8	AUGUST 27.6 28.1 28.5 27.8 28.0 28.4 27.6 27.4 26.0 24.6 24.5 25.9 25.8 26.2 25.1 25.2 24.7 24.3	29.0 29.5 29.8 29.3 29.6 29.2 28.8 27.4 25.4 26.2 27.0 26.8 26.5 25.9 26.1	25.8 26.3 27.2 27.5 26.2 25.5 24.7 22.6 21.7 22.0 23.1 23.9 23.8 23.4	23.7 23.6 24.8 25.3 24.9 24.4 23.5 22.0 20.4 19.6 20.1 20.6 21.7 22.0 22.3 21.8	24.9 25.1 26.1 26.3 25.6 24.8 24.1 23.0 21.6 20.8 21.0 21.9 22.9 22.7 22.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	18.8 20.1 19.6 19.6 20.3 24.2 24.9 23.5 21.4 24.2 25.7 26.4 26.3 25.9 24.5 25.3 26.4 24.5 24.5 24.5 24.5 24.5 24.5 24.5 24	JUNE 16.8 17.8 18.0 17.3 18.8 19.7 22.4 18.9 19.6 21.1 24.0 25.5 25.0 23.6 22.2 22.8 22.8 22.8 22.8 22.8 22.8 22	17.9 18.9 18.8 18.3 19.6 21.5 23.5 20.5 20.4 22.7 24.5 26.0 25.7 24.7 23.3 23.3 24.0 23.5 21.4 22.1 23.7 24.3 24.3 24.3	27.8 28.0 28.8 29.6 28.9 29.4 29.4 29.3 30.3 30.6 30.1 29.0 27.6 27.0 28.5 29.8 30.5 30.1 29.9 30.3 30.0 30.3 30.0 30.3	JULY 23.2 24.0 24.4 25.0 25.7 25.3 26.4 26.1 26.3 26.7 27.2 27.4 26.6 25.2 24.6 24.5 25.7 27.1 26.8 27.7 26.8 27.7 26.8 27.7 26.8	25.4 25.9 26.5 27.3 26.8 27.5 27.7 28.3 28.7 29.1 28.8 27.6 26.5 25.7 26.3 27.9 28.9 28.6 28.5 29.1 29.1 29.5 29.1 29.5 29.1 29.2 29.5 29.2 29.5	29.9 30.5 31.1 30.4 31.0 31.3 30.5 30.7 28.4 26.1 27.9 27.7 27.9 26.6 28.2 26.8 27.1 27.9 27.6 28.6 27.5 28.4 27.9	AUGUST 27.6 28.1 28.5 27.8 28.0 28.4 27.8 27.4 26.0 24.6 24.5 25.8 26.2 25.1 25.2 24.7 24.3 23.9 24.6 25.6 25.3 25.9 25.9 25.9 25.9 25.9 25.9	29.0 29.5 29.8 29.3 29.6 29.8 29.2 28.8 27.4 26.2 27.0 26.8 26.5 25.9 26.5 26.5 26.5 26.6 27.0 26.8	25.8 26.3 27.2 27.5 26.2 25.5 24.7 22.6 21.7 22.0 23.1 23.8 23.4 22.8 18.8 19.8 21.1 22.0 21.7 19.9 18.7	23.7 23.6 24.8 25.3 24.9 24.4 23.5 20.4 19.6 20.1 20.6 21.7 22.0 22.3 21.8 18.5 18.5 19.5 20.4 19.6 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	24.9 25.1 26.1 26.3 25.6 24.8 24.1 23.0 21.6 20.8 21.0 21.9 22.9 22.7 22.2 18.6 19.5 20.4 21.2 20.8 17.6 17.6 17.6 17.5 18.1 18.3 18.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	18.8 20.1 19.6 20.3 24.2 24.9 23.5 21.4 24.2 25.7 26.4 25.9 24.5 25.3 26.4 24.9 24.5 22.9 24.5 23.2 22.9 24.3 25.1 26.6 27.0 25.6 27.0 25.6 25.6 27.0 25.6 25.6 25.6 25.6 25.6 25.6 25.6 25.6	JUNE 16.8 17.8 18.0 17.3 18.8 19.7 22.4 18.9 19.6 21.1 24.0 25.5 25.0 23.6 22.2 22.0 22.2 22.8 23.5 22.8 19.8 20.8 22.9 24.0 23.8 23.4 24.2 24.1	17.9 18.9 18.8 18.3 19.6 21.5 20.5 20.4 22.7 24.5 26.0 25.7 24.7 23.3 24.0 23.5 21.4 22.1 23.7 24.3 24.3 24.3 24.3	27.8 28.0 28.8 29.6 28.9 29.4 29.4 29.3 30.2 30.3 30.6 30.1 29.0 27.6 27.0 28.5 29.8 30.5 30.1 29.9 30.3 30.3 30.6 30.1 29.9	JULY 23.2 24.0 24.4 25.0 25.7 25.3 26.1 26.3 26.7 27.2 27.4 26.8 24.5 25.7 27.7 26.8 27.7 26.8 27.7 26.8 27.7 26.8	25.4 25.9 26.5 27.3 26.8 27.3 27.5 27.7 28.3 28.7 29.1 28.8 27.6 26.5 25.7 26.3 27.9 28.6 28.5 29.1 29.2 29.5 29.1 29.2	29.9 30.5 31.1 30.4 31.0 31.3 30.5 30.7 28.4 26.1 27.9 27.7 27.9 26.6 28.2 26.8 27.1 27.9 27.6 28.2 26.8 27.1 27.9 27.6 28.2 26.8 27.1	AUGUST 27.6 28.1 28.5 27.8 28.0 28.4 27.6 27.4 26.0 24.6 24.5 25.9 25.1 25.2 24.7 24.3 23.9 24.6 25.6 25.6 25.9 24.6 25.5 25.9	29.0 29.5 29.8 29.3 29.6 29.2 28.8 27.4 25.4 26.2 27.0 26.8 26.5 25.9 26.1 25.7 25.6 26.6 27.0 26.9 26.1 26.6	25.8 26.3 27.2 27.5 26.2 25.5 24.7 22.6 21.7 22.0 23.1 23.9 23.8 23.4 22.8 18.8 19.8 21.1 22.0 21.7 19.9 18.7	23.7 23.6 24.8 25.3 24.9 24.4 23.5 22.0 20.4 19.6 20.1 20.6 21.7 22.0 22.3 21.8 18.5 18.5 19.5 20.4 19.5 18.5 19.5 20.4 19.5 18.2 16.3	24.9 25.1 26.1 26.3 25.6 24.8 24.1 23.0 21.6 20.8 21.0 21.9 22.9 22.7 22.2 18.6 19.5 20.4 21.2 20.8 19.5 17.6 17.6 17.0 17.5 18.3

07143672 LITTLE ARKANSAS RIVER AT HIGHWAY 50 NEAR HALSTEAD, KS--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER		D				JANUARY	
1 2 3 4 5	9.8 9.3 8.5 7.5 8.1	8.4 8.1 7.4 6.4 6.8	9.2 8.8 8.0 6.9 7.5	8.3 8.5 9.4 9.8 9.7	7.4 8.0 8.3 9.4 9.3	7.9 8.2 8.9 9.7 9.4	13.5 13.6 	12.3 12.1 	12.9 12.9 	17.2 16.3 16.6 15.4 15.4	13.8 14.0 13.4 12.9 11.9	14.3
6 7 8 9 10	10.7 11.6 11.6 11.7 11.5	8.1 10.3 10.6 10.7 10.6	9.3 10.9 11.2 11.2	9.5 9.6 9.7 10.2 10.4	9.0 8.8 9.0 9.7 9.9	9.3 9.2 9.4 9.9 10.2	14.1 15.0 15.3 14.5	 11.3 11.8 11.7	13.2 13.5 13.0	15.3 15.4 15.6 15.8 15.8	11.9 11.8 11.9 11.9	13.7 13.8
11 12 13 14 15	11.1 10.4 9.4 8.1 8.8	10.3 9.4 8.1 6.9 6.8	10.7 9.8 8.6 7.5 7.8	10.6 10.6 11.0 10.9	10.0 10.2 10.4 10.3 10.4	10.4 10.5 10.7 10.7	15.6 16.4 15.9 16.3 16.0	12.2 14.1 13.1 13.6 13.8	13.7 15.3 14.3 14.9 14.9	15.3 16.3 14.5 16.1 16.1	11.5 11.8 11.1 11.3 11.4	14.1 12.4 13.6
17 18 19	9.2 9.3 8.9 8.6 7.9	7.8 7.9 7.6 7.2 6.8	8.6 8.7 8.3 7.8 7.3	10.9 11.0 10.7 10.7	10.3 10.6 10.4 10.3 10.3	10.5 10.7 10.5 10.5	16.4 16.5 16.2 16.8 17.1	13.1 14.5 13.2 14.2 13.6	14.9 15.6 14.9 15.5 15.4	15.5 17.0 15.8 16.3 17.3	11.7 12.1 12.2 12.5 13.6	13.7 14.6 14.2 14.5 15.5
22 23 24	7.4 7.4 7.2 7.5 8.4	6.3 6.3 5.9 6.1 4.6	6.7 6.8 6.6 6.6 7.4	11.5 12.1 12.3 12.6 13.0	10.5 11.1 11.7 11.9 12.2	10.9 11.6 12.0 12.2 12.6	17.1 16.8 17.7 18.4 17.4	13.5 13.9 13.8 14.3 14.0	15.4 15.5 15.7 16.4 15.3	17.2 17.4 15.9 15.4 15.2	13.4 13.4 13.2 12.2 12.2	15.4 15.4 14.6 13.8 13.8
27 28 29 30	6.9 7.3 8.0 8.0 8.2 8.6	5.8 6.3 7.3 7.5 7.7 8.1	6.4 6.7 7.5 7.8 8.0 8.4	13.1 13.3 13.2 13.7 13.9	12.3 12.2 12.2 12.3 12.6	12.7 12.7 12.7 13.0 13.3	16.9 16.9 17.0 17.4 17.3 16.9	13.6 14.2 13.4 13.3 13.8	15.0 15.5 15.2 15.4 15.6 15.2	15.1 15.8 15.5 16.0 16.3 16.2	11.7 12.2 12.3 11.8 12.0 11.9	14.0 14.0 14.0
MONTH	11.7	4.6	8.3	13.9	7.4	10.7				17.4	11.1	14.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY		FEBRUARY			MARCH			APRIL			MAY	
DAY 1 2 3 4 5					MARCH			APRIL			MAY	
1 2 3 4 5 6 7 8 9	15.2 16.0 15.6 15.8 14.7 14.6 14.3 12.1 14.8 15.6	FEBRUARY	13.5 14.0 13.9 13.8 13.4	12.7 12.7 12.6 12.0	MARCH 12.4 12.4 12.0 11.8 11.7	12.6 12.6 12.3 11.9 12.0		9.6 9.6 9.1 9.0 8.9	10.4 10.3 10.3 10.0 9.5	12.3 11.3 10.3 9.0 10.5	MAY 7.5 6.8 6.6 6.7 6.8	9.6 8.8 8.4 7.8 8.4
1 2 3 4 5 6 7 8 9	15.2 16.0 15.6 15.8 14.7 14.6 14.3 12.1 14.8 15.6	12.4 12.8 12.7 12.4 12.3 11.4 11.4 10.4 11.2 11.6	13.5 14.0 13.9 13.8 13.4 12.9 12.8 11.2 13.0 13.5	12.7 12.7 12.6 12.0 12.2 12.2 12.2 12.1 11.8 11.3	MARCH 12.4 12.4 12.0 11.8 11.7 12.0 12.0 11.7 11.2 10.7	12.6 12.3 11.9 12.0 12.1 12.1 11.9 11.5 11.0	11.7 11.1 11.8 11.0 10.4	9.6 9.6 9.1 9.0 8.9 8.5 8.3 8.3 8.0 7.2	10.4 10.3 10.3 10.0 9.5 8.8 8.9 9.0 7.8	12.3 11.3 10.3 9.0 10.5 9.1 9.2 8.9 9.1 8.7	MAY 7.5 6.8 6.6 6.7 6.8 7.1 6.6 6.9 6.9	9.6 8.8 8.4 7.8 8.4 7.9 7.7 7.8 7.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14	15.2 16.0 15.6 14.7 14.6 14.3 12.1 14.8 15.6	FEBRUARY 12.4 12.8 12.7 12.4 12.3 11.4 11.4 11.2 11.6 12.7 12.8 12.3 12.4	13.5 14.0 13.9 13.8 13.4 12.9 12.8 11.2 13.0 13.5 14.3 14.2 13.7	12.7 12.7 12.6 12.0 12.2 12.2 12.1 11.8 11.3 10.7 11.5 11.4	MARCH 12.4 12.0 11.8 11.7 12.0 12.0 11.7 12.0 11.7 10.7 10.4 10.5 10.9 10.2	12.6 12.6 12.3 11.9 12.0 12.1 12.1 11.5 11.0 10.6 11.1 11.1	11.7 11.8 11.0 10.4 9.4 9.8 9.8 10.3 8.6 9.2 8.2 8.6 8.6	APRIL 9.6 9.6 9.1 9.0 8.9 8.5 8.3 8.3 8.0 7.2 7.4 7.2 7.8 8.4	10.4 10.3 10.3 10.0 9.5 8.8 8.9 9.0 7.8 8.3 7.5 8.4	12.3 11.3 10.3 9.0 10.5 9.1 9.2 8.9 9.1 8.7 8.9 9.4 11.3	MAY 7.5 6.8 6.7 6.8 7.1 6.6 6.9 6.7 6.3 6.4 6.6	9.6 8.8 8.4 7.8 8.4 7.7 7.8 7.6 7.5 7.5 9.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	15.2 16.0 15.6 15.8 14.7 14.6 14.3 12.1 14.8 15.6 16.2 15.8 13.9 13.3 13.6 13.4 13.4 13.4	FEBRUARY 12.4 12.8 12.7 12.4 12.3 11.4 11.4 11.2 11.6 12.7 12.8 12.3 12.4 12.5	13.5 14.0 13.9 13.8 13.4 12.9 12.8 11.2 13.0 13.5 14.3 14.3 14.2 13.0 13.5	12.7 12.7 12.6 12.0 12.2 12.2 12.2 12.1 11.8 11.3 10.7 11.5 11.4 10.9 10.7	MARCH 12.4 12.4 12.0 11.8 11.7 12.0 12.0 11.7 11.2 10.7 10.4 10.5 10.9 10.2 9.9 10.7 11.1 10.4 10.6	12.6 12.6 12.3 11.9 12.0 12.1 11.5 11.0 10.6 11.1 10.5 10.2	11.7 11.8 11.0 10.4 9.4 9.8 9.8 10.3 8.6 9.2 8.2 8.6 8.6 8.6 9.1 11.3 11.9	APRIL 9.6 9.6 9.1 9.0 8.9 8.5 8.3 8.0 7.2 7.4 7.2 7.8 8.4 8.2 8.2 8.8 10.4 10.1	10.4 10.3 10.0 9.5 8.8 8.9 9.0 7.8 8.3 7.5 8.5 8.5 8.6 9.8 10.9	12.3 11.3 10.3 9.0 10.5 9.1 9.2 8.9 9.1 8.7 8.9 9.4 11.3 12.7 13.6	MAY 7.5 6.8 6.7 6.8 7.1 6.9 6.7 6.3 6.4 6.7 6.7 6.7 6.7 6.7 7 6.8	9.6 8.8 8.4 7.8 8.4 7.9 7.7 7.8 7.6 7.5 7.7 8.5 9.2 9.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	15.2 16.0 15.6 15.8 14.7 14.6 14.3 12.1 14.8 15.6 16.2 15.8 15.2 13.9 13.3 13.6 13.4 13.4 13.4 13.1 12.5 12.5 12.9 13.1 12.8 11.3	FEBRUARY 12.4 12.8 12.7 12.4 12.3 11.4 11.4 10.4 11.2 11.6 12.7 12.8 12.3 12.4 12.5 12.8 13.0 12.9 12.9 12.7 12.5 11.9 12.7 10.9 10.9 11.5	13.5 14.0 13.9 13.8 13.4 12.9 12.8 11.2 13.0 13.5 14.3 14.2 13.7 12.9 13.0 13.1 13.2 13.2 13.3 14.2 11.2 13.0 13.1 11.1 12.1 11.1 11.1	12.7 12.7 12.6 12.0 12.2 12.2 12.1 11.8 11.3 10.7 11.5 11.4 10.9 10.7 11.8 11.7 11.1 10.9 10.9	MARCH 12.4 12.4 12.0 11.8 11.7 12.0 12.0 11.7 11.2 10.7 10.4 10.5 10.9 10.2 9.9 10.7 11.1 10.4 10.6 10.6 10.6 10.6 10.6 10.7 10.6 10.6 10.7 10.6 10.7 10.6 10.7 10.6 10.7 10.6 10.7 10.9	12.6 12.6 12.3 11.9 12.0 12.1 11.5 11.0 10.6 11.1 11.1 10.5 10.2 11.3 11.4 10.7 10.8 10.8 10.1 9.8 9.8 10.3	11.7 11.1 11.8 11.0 10.4 9.4 9.8 9.8 10.3 8.6 8.6 8.6 8.6 8.7 11.3 11.9 12.7 13.9 15.7 13.2 14.7 14.9	APRIL 9.6 9.6 9.1 9.0 8.9 8.5 8.3 8.3 8.0 7.2 7.4 7.2 7.8 8.4 8.2 8.8 10.1 9.4 8.9 8.2 8.4 8.1 7.9 8.4 8.7 8.7	10.4 10.3 10.0 9.5 8.8 8.9 9.0 7.8 8.3 7.5 8.4 8.5 8.5 8.1 11.7 	12.3 11.3 10.3 9.0 10.5 9.1 9.2 8.9 9.1 8.7 8.9 9.4 11.3 12.7 13.6 15.3 11.5 14.9 12.5 14.2 12.8 14.4 14.8 16.1	MAY 7.5 6.8 6.7 6.8 7.1 6.6 6.9 6.7 6.3 6.4 6.7 6.7 6.8 7.1 7.4 8.0 8.1 9.4 8.7 8.6 8.3 10.3	9.6 8.8 8.4 7.9 7.7 8.5 7.6 7.5 7.7 8.5 9.2 9.7 10.5 9.2 9.3 10.4 10.4 10.9 11.5 12.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	15.2 16.0 15.6 15.8 14.7 14.6 14.3 12.1 14.8 15.6 16.2 15.8 13.9 13.3 13.6 13.4 13.4 13.4 13.2 12.5 12.9 13.1 12.6 11.3	FEBRUARY 12.4 12.8 12.7 12.4 12.3 11.4 11.4 10.4 11.2 11.6 12.7 12.8 12.3 12.4 12.5 12.8 13.0 12.9 12.3 11.9 12.2 10.7 10.9 10.9 11.5	13.5 14.0 13.9 13.8 13.4 12.9 12.8 13.0 13.5 14.3 14.2 13.0 13.5 14.3 12.9 13.0 13.1 13.2 13.0 13.1 11.2,9 13.0 13.1 11.2,9 13.0 13.1 13.2 13.0 13.0 13.1 13.0 13.0 13.0 13.0 13.0	12.7 12.6 12.0 12.2 12.2 12.2 12.1 11.8 11.3 10.7 11.5 11.4 10.9 10.7 11.8 11.7 11.1 10.9 10.6 10.2 10.0 10.1 10.6	MARCH 12.4 12.0 11.8 11.7 12.0 11.0 11.7 11.2 10.7 10.4 10.5 10.9 10.2 9.9 10.7 11.1 10.4 10.6 10.6 10.6 10.6 10.6 10.6 10.6 10.6	12.6 12.6 12.3 11.9 12.0 12.1 11.5 11.0 10.6 11.1 10.5 10.2 11.3 11.4 10.7 10.8 10.8 10.1 9.8 10.3	11.7 11.1 11.8 11.0 10.4 9.4 9.8 9.8 10.3 8.6 8.6 8.6 8.6 8.7 11.3 11.9 12.7 13.9 15.7 13.2 14.7 14.9 15.1 16.0 16.6	APRIL 9.6 9.6 9.1 9.0 8.9 8.5 8.3 8.0 7.2 7.4 7.2 7.8 8.4 8.2 8.2 8.8 10.1 9.4 8.9 8.2 8.4 8.1 7.9 7.8	10.4 10.3 10.0 9.5 8.8 8.9 9.0 7.8 8.3 7.5 8.5 8.6 9.8 10.9 11.2 11.4 11.7 11.1 11.3 11.4 11.5 11.8	12.3 11.3 10.3 9.0 10.5 9.1 9.2 8.9 9.1 8.7 8.9 9.4 11.3 12.7 13.6 15.3 11.5 14.9 12.5 14.2 12.8 14.4 14.8 16.1	MAY 7.5 6.8 6.7 6.8 7.1 6.9 6.7 6.3 6.4 6.7 6.7 6.7 6.8 7.1 7.4 8.0 8.1 8.4 9.4 8.7 8.6 8.3 8.1	9.6 8.8 4.7.8 8.4 7.9 7.7 8.5 7.6 7.5 7.7 8.5 9.2 9.7 10.5 9.2 9.7 10.6 10.4 10.4 10.4 11.6 12.7

377 07143672 LITTLE ARKANSAS RIVER AT HIGHWAY 50 NEAR HALSTEAD, KS--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAY MAX MIN MEAN MAX MIN MEAN MAX MIN MEAN MAX MIN MEAN

		JUNE			JULY		i	AUGUST		:	SEPTEMBE	R
1 2 3 4 5	7.9 8.0 8.1 8.1 8.2	7.5 7.5 7.2 7.7 7.5	7.7 7.8 7.7 7.8 7.8	8.7 9.1 10.4 12.1 11.5	6.8 6.6 6.6 6.7 6.6	7.6 7.7 8.1 9.0 8.8	8.6 8.6 8.8 8.8	5.2 5.1 5.0 5.6 5.6	7.0 6.9 6.9 7.2 7.1	9.7 9.8 9.7 9.6 9.5	7.7 6.7 7.2 7.4 7.3	8.6 8.5 8.7 8.6 8.2
6 7 8 9 10	7.5 6.9 8.2 6.4 5.3	6.7 6.7 6.4 5.3 4.6	7.0 6.8 6.9 5.7 4.8	14.6 15.0 17.2 17.0 21.9	6.9 7.1 7.0 7.7 8.6	10.3 10.6 11.7 12.2 13.8	8.1 8.6 8.5 8.0 8.3	5.3 6.0 5.8 6.2 6.0	6.7 7.3 7.2 7.2 6.9	9.0 8.6 8.8 8.7 8.8	7.4 7.1 6.7 7.5 7.4	8.1 7.6 7.6 8.1 8.1
11 12 13 14 15	4.9 5.9 6.2 6.5 7.0	4.3 4.4 5.8 6.0 6.5	4.6 5.1 6.0 6.3 6.8	13.8 13.7 14.2 13.2	8.3 8.8 9.7 9.5	 11.2 11.8 11.4	8.6 8.9 8.5 7.9 8.5	7.0 6.8 5.9 5.9	7.6 7.8 7.3 7.0 7.2	8.7 8.4 7.7 7.0 5.4	7.2 7.3 6.4 5.3 4.7	7.9 7.8 7.0 6.1 5.0
16 17 18 19 20	7.1 7.6 7.3 6.6 7.9	6.8 6.9 6.1 6.0	7.0 7.2 7.0 6.2 7.1	13.8 12.7 12.1 10.7 10.2	9.2 8.7 7.8 6.9 6.6	11.3 10.6 9.9 8.8 8.4	9.0 8.4 9.5 9.3 9.4	6.9 6.7 6.8 7.3 7.4	7.8 7.7 8.1 8.3 8.3	5.1 6.2 5.8	4.4 5.7 5.3	4.7 6.0 5.5
21 22 23 24 25	7.2 4.5 4.6 5.7 6.3	4.3 4.0 4.4 4.3 5.7	5.3 4.2 4.5 4.8 6.0	 9.0	 	 	9.3 9.1 9.2 9.2 9.5	7.5 7.3 7.3 6.6 7.0	8.4 8.2 8.2 7.9 8.1	6.1 6.5 6.8 8.0 8.6	5.8 6.1 6.4 6.8 8.0	5.9 6.3 6.6 7.4 8.3
26 27 28 29 30 31	6.7 7.0 7.0 7.5 8.0	6.3 6.7 6.6 6.6 6.8	6.5 6.8 6.8 7.0 7.3	8.3 9.6 8.8 10.0 10.1 9.2	5.1 5.7 5.4 5.6 5.5 5.4	6.8 7.6 7.0 7.5 7.6 7.2	9.4 9.4 9.6 9.3 8.8 9.0	6.7 6.1 5.8 5.9 6.4 6.4	8.1 7.8 7.6 7.7 7.7	8.7 7.8 7.7 7.8 7.9	7.6 7.4 7.4 7.3 7.3	8.2 7.7 7.5 7.5 7.6
MONTH	8.2	4.0	6.4				9.6	5.0	7.6			
THE TOTAL	ry, etem	D, WATER	. UNFILT	ERED, NEPI	HELOMETR:	IC TURBID	OITY UNITS,	WATER Y	EAR OCTOE	BER 2000 TO	O SEPTEM	BER 20
TORRIDIA	,	-		•								
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
			MEAN	MAX		MEAN		MIN ECEMBER	MEAN	MAX	MIN JANUARY	
		MIN	MEAN	MAX	MIN	MEAN			MEAN 13 11 8.0 7.4 7.4	7.6 10 11 11 8.7		
DAY 1 2 3 4	MAX 59 56 62 48	MIN OCTOBER 51 43 42 42	MEAN 54 50 51 44	MAX 1 340 820 690 490	MIN NOVEMBER 230 240 450 280	MEAN 260 470 540 390	14 13 9.0 8.2	12 8.8 6.8 6.7	13 11 8.0 7.4	7.6 10 11 11	JANUARY 6.2 6.3 5.9 5.9	6.7 7.5 7.5 7.6
DAY 1 2 3 4 5 6 7 8 9	59 56 62 48 56 50 35 37 38	MIN OCTOBER 51 43 42 42 42 42 42 42 626	54 50 51 44 49 40 28 29 31	MAX 1 340 820 690 490 290 260 210 170 130	MIN NOVEMBER 230 240 450 280 250 210 170 130 100	MEAN 260 470 540 390 270 240 200 150 120	14 13 9.0 8.2 8.7 7.2 7.9 9.8	12 8.8 6.8 6.7 6.7 6.0 5.1 6.7 6.1	13 11 8.0 7.4 7.4 6.7 6.1 7.8 8.6	7.6 10 11 11 8.7 8.4 8.5 8.1 7.6	JANUARY 6.2 6.3 5.9 5.9 6.6 6.3 6.4 6.1 6.0	6.7 7.5 7.5 7.6 7.3 6.9 7.0 6.9
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14	59 56 62 48 56 50 35 37 38 50 43 48 64 88	MIN OCTOBER 51 43 42 42 42 42 32 24 26 26 31 32 35 42 48	MEAN 54 50 51 44 49 40 28 29 31 37 42 51 68	MAX 340 820 690 490 290 260 210 170 130 100 76 58 45 32	MIN NOVEMBER 230 240 450 280 250 210 170 130 100 76 58 44 32 21	MEAN 260 470 540 390 270 240 200 150 120 91 67 51 39 26	14 13 9.0 8.2 8.7 7.2 7.9 9.8 16 8.9 21 12 7.8 8.3	12 8.8 6.8 6.7 6.7 6.7 6.0 5.1 6.1 6.5 6.6 7.8 6.0	13 11 8.0 7.4 7.4 6.7 6.1 7.8 8.6 7.8 11 9.4 6.8 7.0	7.6 10 11 11 8.7 8.4 8.5 8.1 7.6 11	JANUARY 6.2 6.3 5.9 6.6 6.3 6.4 6.1 6.0 6.7 7.2 6.7 10 7.5	6.7 7.5 7.5 7.6 7.3 6.9 7.3 7.0 6.9 7.8 9.0 8.0
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	59 56 62 48 56 50 35 37 38 50 43 48 64 88 110 45 47	MIN OCTOBER 51 43 42 42 42 24 26 26 26 31 32 35 42 48 73 43 38 42	MEAN 54 50 51 44 49 40 28 29 31 37 42 51 68 90 42 44	MAX 340 820 690 490 290 260 210 170 130 100 76 58 45 32 25 19 13 13 13	MIN NOVEMBER 230 240 450 280 250 210 170 130 100 76 58 44 32 21 19 13 10 9.9 9.3	MEAN 260 470 540 390 270 240 200 150 120 91 67 51 39 26 21 16 12 11	14 13 9.0 8.2 8.7 7.2 7.9 9.8 16 8.9 21 12 7.8 8.3 8.1 8.9 8.4 7.7 9.6	ECEMBER 12 8.8 6.8 6.7 6.7 6.0 5.1 6.5 6.6 7.8 6.0 6.7 6.5 6.6 7.8 6.7 6.7 5.7 5.8	13 11 8.0 7.4 7.4 6.7 6.1 7.8 8.6 7.8 11 9.4 6.8 7.0 7.2 7.1 7.4 6.3 6.9	7.6 10 11 11 8.7 8.4 8.5 8.1 7.6 11 12 12 16 16 15	JANUARY 6.2 6.3 5.9 6.6 6.3 6.4 6.1 6.0 6.7 7.2 6.7 10 7.5 7.9 6.6 6.1 9.5	6.7 7.5 7.5 7.6 7.3 6.9 7.3 7.0 6.9 7.8 9.0 8.0 13 11 9.7 8.9 7.1
DAY 1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	59 56 62 48 56 50 35 37 38 50 43 48 64 88 110 45 47 46 40 78 67 81	MIN OCTOBER 51 43 42 42 42 24 26 26 26 31 32 35 42 48 73 43 38 42 36 35 39 51 43	MEAN 54 50 51 44 49 40 28 29 31 37 42 51 68 90 42 44 41 38 47 58 48	MAX 340 820 690 490 290 260 210 170 130 100 76 58 45 32 25 19 13 13 12 13 12 13 13 13 12 13	MIN NOVEMBER 230 240 450 280 250 210 170 130 100 76 58 44 32 21 19 13 10 9.9 9.3 7.9 7.6 7.9 7.6 7.9 7.3 8.7	MEAN 260 470 540 390 270 240 200 150 120 91 67 51 39 26 21 16 12 11 10 9.5 8.2 8.9 8.8 10	14 13 9.0 8.2 8.7 7.2 7.9 9.8 16 8.9 21 12 7.8 8.3 8.1 8.9 8.4 7.7 9.6 8.3	ECEMBER 12 8.8 6.8 6.7 6.7 6.0 5.1 6.5 6.6 7.8 6.0 6.7 6.3 6.7 5.8 6.3 6.7 7.2 7.0 6.8	13 11 8.0 7.4 7.4 6.7 6.1 7.8 8.6 7.8 11 9.4 6.8 7.0 7.2 7.1 7.4 6.9 6.9 8.3 8.2 7.6 8.1	7.6 10 11 11 8.7 8.4 8.5 8.1 7.6 11 12 16 16 15 11 9.5 13 12 10 10 9.3 11	JANUARY 6.2 6.3 5.9 6.6 6.3 6.4 6.0 6.7 7.2 6.7 10 7.5 7.9 6.6 6.1 9.6 7.3 7.0 7.3 6.9 6.6	6.7 7.5 7.5 7.6 7.3 6.9 7.3 7.0 6.9 7.8 9.0 8.0 13 11 9.7 8.9 7.1 12 11 8.4 7.6 7.9 8.2

07143672 LITTLE ARKANSAS RIVER AT HIGHWAY 50 NEAR HALSTEAD, KS--Continued

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR OCTOBER 200 TO SEPTEMBER 20

TURBIDI'	TY, FIE	LD, WATER,	UNFILT	ERED, NEP	HELOMETRI	C TURBIDIT	TY UNITS,	WATER	YEAR OCTOBER	2000	TO SEPTEM	BER 20
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	19 21 23 17 18	16 15 11 14 12	17 18 17 16 14	1200 870 540 610 420	810 540 410 410 260	980 700 470 460 320	45 41 39 45 63	41 34 35 37 41	43 37 37 42 54	42 43 54 89 480	18 27 31 54 55	30 32 36 66 91
6 7 8 9 10	22 25 79 50 18	16 15 23 18 12	18 19 39 27 14	260 180 150 130 100	180 150 130 100 88	220 160 140 120 97	66 71 65 57 1300	54 64 52 44 45	62 67 58 51 310	480 210 130 130 130	100 110 100 100 83	180 140 110 120 110
11 12 13 14 15	15 12 69 69 170	10 9.5 11 31 59	12 10 23 51 94	110 >1500 >1500 >1500 >1500	79 110 >1500 1200 1000	89 >1100 >1500 >1400 >1300	400 >1500 640 420 360	100 400 240 170 190	160 >1100 400 220 230	120 110 110 100 93	83 85 85 68 62	100 98 97 85 82
16 17 18 19 20	190 160 160 100 89	150 130 100 86 72	170 140 120 93 78	>1500 >1500 >1500 >1500 1100	>1500 >1500 1300 1000 700	>1500 >1500 >1400 >1200 870	190 130 78 69	120 77 64 59 61	150 97 70 64 65	94 97 88 55 e78	61 66 e45 36 33	e81 e90 e77 e44 e55
21 22 23 24 25	360 550 670 >1500 >1500		160 400 380 >1200 >1500	700 460 330 220 140	460 330 220 140 93	560 390 280 180 110	76 78 78 62 58	66 69 59 48 49	70 73 68 55 53	61 65 e73 57 e52	50 e40 48 39 30	e53 e55 e58 e46 e40
26 27 28 29 30 31	>1500 >1500 >1500 		>1500 >1400 >1400 	93 73 59 48 56 52	73 59 43 40 47 45	82 68 50 43 52 49	73 53 36 38 38	43 20 14 15 18	54 37 23 26 28	e54 61 e71 69 70 950	42 39 50 45 52 66	48 e51 e61 e56 59 350
MONTH	1500	9.5	320	1500	40	560	1500	14	130	950	18	84
MONTH												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN		MIN AUGUST	MEAN	MAX	MIN SEPTEMBEI	
	770 480 1000 940 1200		MEAN 610 370 620 770 710	MAX 67 63 56 51 50		MEAN 61 54 50 45 44			MEAN 53 57 62 60 55	MAX 46 42 40 47 49		
DAY 1 2 3 4	770 480 1000 940	JUNE 480 290 290 660	610 370 620 770	67 63 56 51	JULY 48 47 41 35	61 54 50 45	61 64 79 68	AUGUST 44 47 48 50	53 57 62 60	46 42 40 47	31 28 27 25	38 35 34 34
DAY 1 2 3 4 5 6 7 8 9	770 480 1000 940 1200 610 340 >1500 1100	JUNE 480 290 290 660 480 340 210 200 680	610 370 620 770 710 460 270 >850 840	67 63 56 51 50 51 53 64 64	JULY 48 47 41 35 32 34 31 38 40	61 54 50 45 44 43 42 46 51	61 64 79 68 66 68 67 73 84	44 47 48 50 43 41 40 51 39	53 57 62 60 55 55 55 59 61	46 42 40 47 49 50 55 54 55	31 28 27 25 26 29 31 30 27	38 35 34 34 34 35 40 39 35
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14	770 480 1000 940 1200 610 340 >1500 1100 740 450 390 350 300	JUNE 480 290 290 660 480 340 210 200 680 450 320 330 300 250	610 370 620 770 710 460 270 >850 840 550 370 370 330 280	67 63 56 51 50 51 53 64 64 59 56 55 62 66	JULY 48 47 41 35 32 34 31 38 40 40 37 39 44 44	61 54 50 45 44 43 42 46 51 51 48 49 53 57	61 64 79 68 66 68 67 73 84 60 58 53 59 61	44 47 48 50 43 41 40 51 39 40 36 34 39 41	53 57 62 60 55 55 55 59 61 52 49 45 49 53 53	46 42 40 47 49 50 55 55 50 48 47 48	31 28 27 25 26 29 31 30 27 29	38 35 34 34 34 35 35 35 35 36 37 38 40
DAY 1 2 3 4 5 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19	770 480 1000 940 1200 610 340 1100 740 450 390 350 250 160 130 430	JUNE 480 290 290 660 480 340 210 200 680 450 320 330 300 250 160 130 100 190	610 370 620 770 710 460 270 >850 840 550 370 370 370 330 280 200 140 110 200 310	67 63 56 51 50 51 53 64 64 59 56 55 62 66 63 330 67 60 56	JULY 48 47 41 35 32 34 31 38 40 40 40 37 39 44 48 45 35 38 35	61 54 50 45 44 43 42 46 51 51 48 49 53 57 55 94 52 50 47	61 64 79 68 66 68 67 73 84 60 58 53 59 62 59 66 53 54	44 47 48 50 43 41 40 51 39 40 36 34 43 39 31 31 30	53 57 62 60 55 55 55 59 61 52 49 45 49 53 53 53	46 42 40 47 49 50 55 55 50 48 45 47 48 51 52 >>1400	31 28 27 25 26 29 31 30 27 29 30 27 30 27 30 27 36 36 36	38 35 34 34 34 35 40 39 35 35 36 37 38 40 44 42 >1300
DAY 1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	770 480 1000 940 1200 610 340 >1500 1100 740 450 390 350 250 160 130 430 430 430 490 >1500 290 420 430 410 290 200 150 1100 82	JUNE 480 290 660 480 340 210 200 680 450 320 330 300 250 160 130 100 190 90 93 420 330 330 290 200 150 110 81 61	610 370 620 770 710 460 270 >850 840 550 370 370 380 200 140 110 200 110 200 >990 600 370 380 350 240 170 130 93 75	67 63 56 51 50 51 53 64 64 59 56 62 66 63 330 67 60 55 77 71 53 56 68 57 75 56 57	JULY 48 47 41 35 32 34 31 38 40 40 40 37 39 44 48 45 35 38 35 35 32 33 38 40 40 38 41 43 42 35 37	61 54 50 45 44 43 42 46 51 51 48 49 53 57 55 94 52 50 47 47 47 48 44 47 53 53 53 53 53 53 53 54 44 47 47 47 47 47 47 47 47 47 47 47 47	61 64 79 68 66 68 67 73 84 60 58 53 59 62 59 66 53 59 63 45 43 43 43 75	44 47 48 50 43 41 40 51 139 40 36 34 43 39 31 33 32 29 31 126 28 31 27 29 29 29	53 57 62 60 55 55 55 59 61 52 49 45 49 43 41 42 47 41 42 43 35 35 38	46 42 40 47 49 50 55 54 55 50 48 45 47 48 51 52 >1400 1100 690 570 440 160 130 100 84	31 28 27 25 26 29 31 30 27 29 30 27 33 36 36 1100 670 560 440 350 130 100 82 68	38 35 34 34 34 35 40 39 35 35 35 36 37 38 40 44 42 >1300 890 610 510 380 e300 e260 e260 e200 110 93 77
DAY 1 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 7 18 19 20 21 22 23 24 25 26 27 28 29	770 480 1000 940 1200 610 3100 740 450 390 250 160 130 430 430 490 200 110 290 200 110	JUNE 480 290 660 480 340 210 200 680 450 320 330 300 250 160 130 100 190 90 93 420 330 330 290 200 150 110 81	610 370 620 770 710 460 270 >850 840 550 370 370 330 280 200 140 110 200 310 120 >990 600 370 380 350 240 170 170 170 170 170 170 170 17	67 63 56 51 50 51 53 64 64 59 56 62 66 63 330 67 760 56 57 71 53 56 68 57 68 57	JULY 48 47 41 35 32 34 31 38 40 40 40 37 39 44 44 48 45 35 38 35 35 32 33 88 40 38 41 43 42 35	61 54 50 45 44 43 42 46 51 51 48 49 53 57 55 94 52 50 47 47 47 48 44 47 50 53 53 53 53 53 54 44	61 64 79 68 66 68 67 73 84 60 58 53 59 61 62 59 66 53 54 50 71 50 92 63 45 43 43 43 43 43 44 43 44 44 44 44 44 44	44 47 48 50 43 41 40 51 39 40 36 34 43 39 31 30 33 32 29 931 26 28 31 27 27 29	53 57 62 60 55 55 55 59 61 52 49 45 49 43 41 42 47 41 42 43 35	46 42 40 47 49 50 554 55 50 48 45 47 48 51 >1400 1100 690 570 440 410 1100	31 28 27 25 26 29 31 30 27 29 30 27 29 30 670 560 440 350 130 100 82	38 35 34 34 34 35 40 39 35 35 36 37 38 40 44 42 >1300 890 610 510 3800 e260 e200 140 110 93

e Estimated

> Actual value is known to be greater than the value shown

07144100 LITTLE ARKANSAS RIVER NEAR SEDGWICK, KS

LOCATION.--Lat $37^{\circ}52^{\circ}59^{\circ}$, long $97^{\circ}25^{\circ}27^{\circ}$, in NE $^{1}/_{4}$ NW $^{1}/_{4}$ Sec.15, T.25 S., R.01 W., Sedgwick County, Hydrologic Unit 11030012, on left bank at downstream side of county highway bridge, 2.1 mi south of Sedgwick, and at mile 23.7.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--1,239 mi^2 , of which about 74 mi^2 is probably noncontributing.

PERIOD OF RECORD. -- October 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,340.00 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow of stream affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of $2,700~{\rm ft}^3/{\rm s}$ and maximum (*):

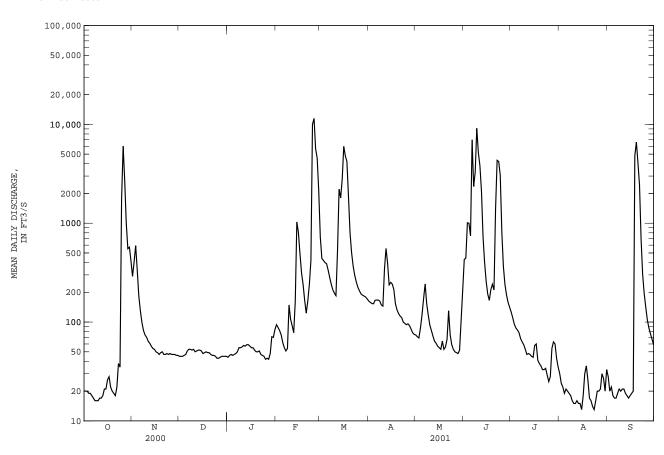
Date	Tim	ne	Discharge (ft ³ /s)	Gag	ge height (ft)		Date	Time	e	Discharge (ft ³ /s)		height ft)
Oct 26 Feb 25 Mar 16 Jun 6	060 unkn 030 100	nown 10	6,990 *11,800 6,490 8,960	:	17.21 *21.78 17.96 20.14		Jun 9 Jun 22 Sep 18	050 090 240	0	10,900 4,510 8,580	1	1.63 4.82 9.83
		DISCHA	ARGE, CUBIC	FEET PI		WATER YE Y MEAN VA		2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	290	45	44	94	722	163	74	430	126	30	28
2	20	406	45	46	88	440	158	71	443	110	24	20
3	20	592	45	47	82	e420	154	69	1010	95	22	22
4	19	337	46	46	74	e400	153	87	999	87	19	18
5	19	184	47	47	62	389	166	118	747	83	21	17
6	18	130	51	48	55	336	167	172	6980	78	20	17
7	17	99	53	50	51	283	167	243	2350	68	19	19
8	16	82	53	55	54	241	163	153	3290	63	18	21
9	16	74	52	55	149	212	149	117	9120	59	16	20
10	16	70	53	56	107	196	145	93	5190	53	15	21
11	17	64	50	58	92	185	342	82	3830	47	15	21
12	17	61	e51	57	78	530	556	72	2100	48	16	19
13	18	57	52	59	162	2210	394	64	730	47	15	18
14	21	54	52	59	1030	1800	238	61	400	45	15	17
15	21	53	51	57	807	2790	252	57	257	44	13	18
16	26	50	48	55	492	5990	242	55	192	58	18	19
17	28	49	e49	55	315	4790	213	53	166	60	30	20
18	22	47	50	52	240	4210	154	64	213	41	36	4830
19	20	49	e49	e50	166	1860	133	53	241	38	26	6600
20	19	50	49	50	123	798	122	56	211	36	17	4080
21	18	47	47	51	163	503	115	67	1390	33	16	2420
22	22	47	e46	47	240	367	111	130	4330	33	14	691
23	38	48	46	46	421	297	100	74	4210	34	13	303
24	35	47	e45	45	e10000	254	97	59	3060	29	16	193
25	1760	48	43	42	e11500	225	94	53	825	25	20	141
26 27 28 29 30 31	6010 2680 994 552 573 414	47 47 47 46 46	43 44 45 45 45 45	43 42 48 71 70 84	5650 4550 2110 	207 193 187 183 179 171	96 92 85 78 75	50 49 48 52 104 211	365 240 188 158 141	28 54 63 60 43 35	20 21 30 27 20 33	105 87 76 67 59
MEAN	435	109	47.9	52.7	1391	1018	172	87.5	1794	55.6	20.5	666
MAX	6010	592	53	84	11500	5990	556	243	9120	126	36	6600
MIN	16	46	43	42	51	171	75	48	141	25	13	17
AC-FT	26750	6480	2950	3240	77270	62620	10260	5380	106700	3420	1260	39640

07144100 LITTLE ARKANSAS RIVER NEAR SEDGWICK, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	3	MAR	APR	MA	y Jui	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	243 893 1999 8.92 1995	547 3319 1999 19.9 1995	142 412 1998 18.8 1995	82.8 219 1999 21.4 1995	357 1391 2001 19.5 1995	-	579 2218 2000 34.5 1996	344 1260 1999 38.6 1996	81: 442: 199: 53.: 199:	3 292° 5 1995 5 50.6	921 1999 50.0	256 747 1999 15.8 1994	259 666 2001 9.13 1994
SUMMARY	STATIST	ICS	FOR 2	2000 CALE	NDAR YE	AR		FOR 2001	WATER Y	AR	WATER	YEARS 199	4 - 2001
	MEAN ANNUAL M ANNUAL MI			390				478			410 859 69.	3	1999 1994
HIGHEST	DAILY M	EAN		10500	Mar	24		11500	Feb	25	17600	Nov	2 1998
	DAILY MEA			16	Oct	8		13	Aug		6.		8 1994
		Y MINIMUM		17	0ct	6		15	Aug	9	7.		6 1994
	PEAK FLO							11800	Feb		17600	Nov	1 1998
	PEAK STA							21.78	Feb		25.		1 1998
	ANEOUS LO RUNOFF (A			283000				11 346000	Sep	9	3. 297100	5 Aug	19 1998
	ENT EXCE			749				802			747		
	ENT EXCE			79				59			68		
	ENT EXCE			19				19			20		

e Estimated



07144100 LITTLE ARKANSAS RIVER NEAR SEDGWICK, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. -- Water years 1998 to current year.

PERIOD OF DAILY RECORD. --

SPECIFIC CONDUCTANCE: May 1998 to current year.

PH: May 1998 to current year.
WATER TEMPERATURE: May 1998 to current year.
DISSOLVED OXYGEN: October 1998 to current year.
TURBIDITY: October 1998 to current year.

INSTRUMENTATION. -- Multiparameter water-quality monitor.

REMARKS.--Records good. Interruptions in record are due to ice condtions or malfunction of the recording instrument or sensors. Instruments used to measure trubidity conform to ISO 7027 standards.

EXTREMES FOR PERIOD OF RECORD .--

SPECIFIC CONDUCTANCE: Maximum, 1,540 microsiemens/cm, May 13, 1998; minimum, 36 microsiemens/cm, Sept. 18, 2001. pH: Maximum, 9.0 standard units, July 6, 2001; minimum, 6.7 standard units, June 20, 1999. WATER TEMPERATURE: Maximum, 35.3 °C, July 4, 1998; minimum, 0.0 °C, Jan. 2, 1999. DISSOLVED OXYGEN: Maximum 23.5 mg/L, Aug. 16, 1999; minimum, 0.1 mg/L, Aug. 4, 1999. TURBIDITY: Maximum, >2,000 NTU, June 6, 2001; minimum, 3.2 NTU, Dec. 21, 2000.

EXTREMES FOR CURRENT YEAR . --

TREMES FOR CURRENT YEAR.-
SPECIFIC CONDUCTANCE: Maximum, 1,310 microsiemens/cm, Dec. 27; minimum, 69 microsiemens/cm, Sept. 18. pH: Maximum, 9.0 standard units, July 6; minimum, 6.9 standard units, Oct. 26.

WATER TEMPERATURE: Maximum, 31.6 °C, July 18; minimum, 0.0 °C, Jan. 19.

DISSOLVED OXYGEN: Maximum, 19.7 mg/L, Jan. 4; minimum, 5.0 mg/L, June 22.

TURBIDITY: Maximum, >2,000 ntu, June 6; minimum, 3.2 ntu, Dec. 21.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER		NO	VEMBER		D	ECEMBER			JANUARY	•
1 2 3 4 5	832 830 848 880 897	816 815 816 838 870	825 822 831 864 886	412 446 451 484 445	317 305 364 381 427	364 373 408 445 432	1040 1060 1080 1100	1010 1040 1060 1080 1090	1030 1050 1070 1090 1100	1280 1290 1300 1280 1240	1260 1240 1250 1240 1220	1270 1270 1270 1260 1240
6 7 8 9 10	934 965 971 975 991	894 934 940 950 971	918 949 960 963 980	491 521 541 575 588	433 487 510 541 575	457 507 519 557 582	1100 1080 1060 1070 1090	1080 1060 1030 1050 1070	1090 1070 1050 1060 1080	1230 1190 1170 1190 1180	1190 1160 1160 1150 1160	1200 1170 1160 1170 1170
11 12 13 14 15	999 996 1000 1010 1060	971 955 938 875 989	985 976 992 976 1030	611 637 664 665 683	588 606 625 649 665	605 626 648 659 674	1110 1180 1190 1160 1110	1090 1110 1150 1100 1080	1100 1150 1160 1130 1090	1160 1150 1150 1170 1230	1130 1130 1120 1130 1140	1140 1140 1140 1140 1170
16 17 18 19 20	989 1060 1010 1070 1050	918 962 982 1010 1000	962 1020 994 1050 1030	699 730 739 750 792	683 699 715 729 748	688 716 728 743 772	1090 1110 1180 1180 1200	1070 1060 1090 1140 1140	1080 1090 1160 1170 1180	1250 1250 1290 1290 1280	1100 1130 1170 1180 1160	1170 1180 1220 1210 1230
21 22 23 24 25	1000 987 916 922 776	987 880 820 727 159	997 941 872 798 471	819 844 866 896 920	792 819 844 866 896	811 838 859 885 909	1200 1200 1190 1170 1270	1170 1170 1170 1160 1160	1190 1180 1180 1160 1210	1280 1230 1190 1170 1200	1230 1170 1110 1100 1100	1250 1190 1140 1130 1120
26 27 28 29 30 31	228 357 335 320 357 343	141 192 277 295 267 285	173 290 293 307 325 305	952 952 966 997 1010	920 942 940 966 992	941 947 950 983 1000	1310 1310 1260 1240 1230 1260	1270 1260 1220 1200 1200 1200	1290 1290 1240 1220 1210 1240	1210 1200 1200 1080 953 949	1070 1100 1030 939 923 901	1100 1130 1070 982 939 926
MONTH	1070	141	800	1010	305	688	1310	1010	1140	1300	901	1160

07144100 LITTLE ARKANSAS RIVER NEAR SEDGWICK, KS--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

SI	PECIFIC	CONDUCTA	INCE (MIC	ROSIEMENS/	CM AT 25	DEG. C)	, WATER YE	SAR OCTO	3ER 2000	IO SEPIEME	SER ZUUI	
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	1030 1230 1220 1260 1150	911 1030 1080 1120 1110	965 1100 1140 1230 1130	396 598 651	297 598	349 e420 e500 e580 627	1010 1050 1040 1030 1070	988 999 1010 996 1020	1000 1020 1020 1010 1050	1190 1180 1080 1040 1010	1140 1070 1030 987 820	1170 1120 1050 1020 882
6 7 8 9 10	1280 1230 1170 1020 938	1110 1160 1020 630 e695	1200 1170 1120 762 e789	755 806 827 	651 731 806 	691 757 820 	1110 1030 987 993 979	1030 953 954 973 938	1090 997 973 982 968	959 750 768 935 1050	750 608 640 768 935	885 638 680 852 995
11 12 13 14 15	918 955 950 598 508	798 907 598 325 334	857 935 824 420 437	1010 546 355 344	472 323 321 164	 389 334 262	1040 936 880 870 803	450 424 507 731 679	790 659 660 833 755	1120 1140 1160 1140 1130	1040 1120 1130 1110 1120	1080 1120 1150 1120 1130
16 17 18 19 20	691 879 861 765 730	508 691 724 730 684	625 802 803 751 699	184 195 233 315 408	147 180 185 233 315	164 186 204 266 358	679 611 746 838 838	511 516 610 737 814	548 547 701 801 822	1150 1120 1080 982 1000	1100 1060 982 955 969	1120 1090 1040 966 989
21 22 23 24 25	725 731 808 343 166	677 660 343 	694 702 652 	505 611 685 752 818	374 505 568 685 752	451 563 645 713 783	883 932 949 967 966	831 883 902 949 e949	853 908 930 e960 e958	973 969 813 930 958	882 499 679 813 925	930 742 740 883 943
26 27 28 29 30 31	170 218 297 	158 170 218 	162 188 252 	861 897 973 1000	818 861 905 972	846 878 e900 e925 948 989	e1030 e1060 e1090 1120 1140	951 e1030 1050 1060 1120	e986 e1060 e1070 1100 1120	965 965 948 924 836 800	e953 924 924 820 606 578	e959 e951 e937 e906 765 652
MONTH	1280	158	785	1010	147	576	1140	424	906	1190	499	952
D.111						MERNY				147.15		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBE	R
DAY 1 2 3 4 5	MAX 1060 1190 505 372 384		MEAN 823 844 353 329 334	MAX 634 665 689 705 726		601 e645 671 693 713			MEAN e757 762 772 775	MAX 850 678 732 747 743		
1 2 3 4	1060 1190 505 372	JUNE 568 505 301 288	823 844 353 329	634 665 689 705	JULY 541 629 658 678	601 e645 671 693	e765 773 790 786	748 753 758 767	e757 762 772 775	850 678 732 747	589 603 678 716	716 643 713 736
1 2 3 4 5 6 7 8	1060 1190 505 372 384 176 182 203 152	JUNE 568 505 301 288 176 95 118 112 95	823 844 353 329 334 109 146 164 115	634 665 689 705 726	JULY 541 629 658 678 699 705	601 e645 671 693 713 e735 e750 e775 e790	e765 773 790 786 783 812 841 872 886	748 753 758 767 769 779 807 838 864	e757 762 772 775 775 798 830 856 876	850 678 732 747 743 747 787 810 838	589 603 678 716 719 697 744 787 805	716 643 713 736 739 734 767 799 820
1 2 3 4 5 6 7 8 9 10	1060 1190 505 372 384 176 182 203 152 186 251 284 360 425	JUNE 568 505 301 288 176 95 118 112 95 152 186 248 283 360	823 844 353 329 334 109 146 115 175 216 260 327 391	634 665 689 705 726 824 815 794	JULY 541 629 658 678 699 705 788 798 780	601 e645 671 693 713 e735 e750 e775 e790 803 807 e800 e795 788	e765 773 790 786 783 812 841 872 886 877 858 850 846 842	748 753 758 767 769 779 807 838 864 850 842 834 813 820	e757 762 772 775 775 778 830 856 876 863 851 843 831 832	850 678 732 747 743 747 787 810 838 871 874 854 896 925	589 603 678 716 719 697 744 787 805 805	716 643 713 736 739 734 767 799 820 837 785 810 883 908
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	1060 1190 505 372 384 176 182 203 152 186 251 284 360 425 490 560 628 665 733	JUNE 568 505 301 288 176 95 118 112 95 152 186 248 283 360 425 490 552 624 644	823 844 353 329 334 109 146 115 175 216 260 327 391 453 521 586 642 696	634 665 689 705 726 824 815 794 799 813 813 778 e806	JULY 541 629 658 678 699 705 788 798 780 766 769 687 735 748	601 e645 671 693 713 e735 e750 e775 e790 803 807 e800 e795 788 781 791 731 764 e790	e765 773 790 786 783 812 841 872 886 877 858 850 846 842 827 818 824 817 826	748 758 757 769 779 807 838 864 850 842 834 813 820 796 801 793 760 795	e757 762 772 775 775 778 830 856 876 863 851 843 831 832 813 810 808 795 815	850 678 732 747 743 747 787 810 838 871 874 854 896 925 953 996 998 998 991 147	589 603 678 716 719 697 744 787 805 805 716 747 854 895 925 925	716 643 713 736 739 734 767 799 820 837 785 810 883 908 941 978 986 267 121
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	1060 1190 505 372 384 176 182 203 152 186 251 284 360 425 490 560 628 665 733 722 638 283 187 261	JUNE 568 505 301 288 176 95 118 112 95 152 186 248 283 360 425 490 552 624 484 210 152 165 187	823 844 353 329 334 109 146 115 175 216 260 327 391 453 521 586 642 696 545 449 173 171 226	634 665 689 705 726 824 815 794 799 813 813 778 e806 823 809 844 844 823	JULY 541 629 658 678 699 705 788 798 780 766 769 687 735 748 792 772 787	601 e645 671 693 713 e735 e750 e775 e790 803 807 e800 e795 788 781 791 731 764 e790 810 793 820 816 805	e765 773 790 786 783 812 841 872 886 877 858 850 846 842 827 818 824 817 826 830 832 849 781	748 758 769 779 807 838 864 850 842 834 813 820 796 801 793 760 795 807	e757 762 772 775 775 798 830 856 876 863 851 843 831 832 813 810 808 795 815 819	850 678 732 747 743 747 787 810 838 871 874 854 896 925 953 996 998 951 147 145 185 245 281 2317	SEPTEMBE 589 603 678 716 719 697 744 787 805 805 716 747 854 895 925 953 946 69 110 124 144 185 245 281	716 643 713 736 739 734 767 799 820 837 785 810 883 908 941 978 986 267 121 136 162 214 264 6302
1 2 3 4 4 5 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1060 1190 505 372 384 176 182 203 152 186 251 284 490 560 628 665 733 722 638 283 187 261 332 398 464 522 563 586	JUNE 568 505 301 288 176 95 118 112 95 152 186 248 283 360 425 490 552 644 484 210 152 165 187 261 332 398 460 519 542	823 844 353 329 334 109 1464 115 175 216 260 327 391 453 521 586 642 696 545 449 173 171 226 298 365 433 493 574	634 665 689 705 726 824 815 794 799 813 813 778 e806 823 809 844 844 844 844 844 844 847 790	JULY 541 629 658 678 699 705 788 798 780 766 769 687 735 748 792 772 787 798 775 770 729 594 491 652 e682	601 e645 671 693 713 e735 e750 e775 e790 803 807 e800 e795 788 781 791 731 764 e790 810 793 820 816 805 780 753 724 582 6699	e765 773 790 786 783 812 841 872 886 877 858 850 846 842 827 818 824 817 826 830 832 824 809 781 759	AUGUST 748 753 758 767 769 779 807 838 864 850 842 834 813 820 796 801 793 760 795 807 817 799 775 732 732 759 e749 781	e757 762 772 775 775 798 830 856 876 863 851 843 831 832 813 810 808 795 819 826 812 798 769 747 772 e768 e800 e825 828	850 678 732 747 743 747 787 810 838 871 874 854 896 995 953 996 998 951 147 145 185 245 281 281 281 217 e355	SEPTEMBE 589 603 678 716 719 697 744 787 805 805 716 747 854 895 925 953 946 69 110 124 144 185 245 245 245 245 245 245 245 241 2317	716 643 713 736 739 734 767 799 820 837 785 810 883 908 941 978 986 267 121 136 162 214 264 6302 6336 9404 435 464 487

e Estimated

ARKANSAS RIVER BASIN

383 07144100 LITTLE ARKANSAS RIVER NEAR SEDGWICK, KS--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN I	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		OCTOBER		:				DECEMBER			JANUAR	
		8.4 8.4 8.4 8.3								8.3 8.2 8.2 8.3 8.3		
6 7 8 9 10	8.6 8.6 8.5 8.4 8.4	8.3 8.4 8.4 8.3 8.1		7.8 7.9 7.9 7.9						8.3 8.3 8.3 8.3		
11 12 13 14 15	8.4 8.4 8.3 8.4	8.1 8.0 8.0 7.9 7.9	8.2 8.2 8.2 8.2 8.2	7.9 7.9 8.0 8.0	7.9 7.9 7.9 7.9					8.4 8.4 8.5 8.5		
16 17 18 19 20	8.4 8.3 8.4 8.4	7.9 7.9 7.8 7.9		8.0 8.0 8.0 8.0						8.4 8.4 8.4 8.4		
21 22 23 24 25	8.1 7.9 8.1 7.8 7.8	7.8 7.7 7.7 7.7 6.9	8.0 7.9 7.8 7.7 7.7	8.0 8.0 8.0 8.0	8.0 8.0 8.0 8.0	8.0 8.0 8.0 8.0	8.1 8.1 8.1 8.1	8.0 8.0 8.0 8.0	8.1 8.1 8.1 8.1	8.3 8.3 8.3 8.3	8.2 8.2 8.2 8.1 8.2	8.2 8.2 8.2 8.2 8.2
26 27 28 29 30 31	7.2 7.3 7.5 7.6 7.6	6.9 7.2 7.3 7.5 7.5	7.2 7.3 7.4 7.5 7.6 7.6	8.1 8.1 8.2 8.2	8.0 8.0 8.1 8.1	8.1 8.1 8.1 8.1	8.1 8.1 8.2 8.2 8.2	7.9 7.9 8.0 8.1 8.1	8.0 8.0 8.1 8.2	8.5 8.5 8.4 8.4 8.4	8.2 8.2 8.2 8.2 8.1	8.3 8.4 8.3 8.3 8.3
MAX MIN	8.6 7.2	8.4 6.9	8.5 7.2	8.2 7.7	8.1 7.6	8.1 7.6	8.5 8.1	8.3 7.9	8.3 8.0	8.5 8.2	8.3 8.1	8.4 8.1
DAY	MAX	MIN I	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	:	FEBRUARY			MARCH			APRIL			MAY	
	:				MARCH			APRIL		8.6 8.6 8.4 8.4	MAY	
	8.3 8.3 8.3 8.4 8.3	FEBRUARY	8.3 8.3 8.2 8.3 8.2		7.7 7.9	7.7 e7.8 e7.8 e7.9 7.9	8.4 8.4 8.5 8.5	APRIL 8.2 8.2 8.2 8.3 8.3	8.3 8.3 8.3 8.4		MAY 8.4 8.2 8.1 8.1	8.5 8.4 8.3 8.2 8.1
1 2 3 4 5 6 7 8 9	8.3 8.3 8.4 8.3 8.2 8.1 8.1	8.2 8.2 8.2 8.2 8.1 8.1 8.1 8.0 7.9 8.0	8.3 8.3 8.2 8.3 8.2 8.1 8.2 8.1 8.0 8.1	7.8 7.9 8.0	7.7 7.9 7.9 8.0 8.0 8.0	7.7 e7.8 e7.8 e7.9 7.9 8.0 8.0 8.0 8.1	8.4 8.4 8.5 8.5	APRIL 8.2 8.2 8.3 8.3 8.3 8.2 8.2 8.2 8.2	8.3 8.3 8.4 8.4 8.3 8.3 8.3	8.6 8.6 8.4 8.2	MAY 8.4 8.2 8.1 8.1 8.0 8.0 7.9 7.9 8.0 8.1	8.5 8.4 8.3 8.2 8.1 8.1 7.9 7.9 8.0 8.1
1 2 3 4 5 6 7 8 9 10 11 12 13 14	8.3 8.3 8.4 8.3 8.2 8.3 8.2 8.1 8.1 8.1	### REBRUARY ### 8.2	8.3 8.3 8.2 8.3 8.2 8.1 8.2 8.1 8.0 8.1 8.1 8.1	7.8 7.9 8.0 8.0 8.0 8.1 8.1	7.7 7.9 7.9 8.0 8.0 8.0 8.0	7.7 e7.8 e7.8 e7.9 7.9 8.0 8.0 8.0 8.1 e7.9 e7.7 7.6	8.4 8.4 8.5 8.5 8.5 8.4 8.4 8.5 8.4 8.5 8.4	APRIL 8.2 8.2 8.3 8.3 8.3 8.2 8.2 8.2 8.2 7.9 7.9 7.8	8.3 8.3 8.4 8.4 8.3 8.3 8.3 8.3 8.3 8.7 9.9	8.6 8.4 8.4 8.2 8.0 8.0 8.1 8.2 8.3 8.4 8.5	MAY 8.4 8.2 8.1 8.0 8.0 7.9 7.9 8.0 8.1 8.1 8.1 8.2	8.5 8.4 8.3 8.2 8.1 7.9 7.9 8.1 8.1 8.2
1 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15	8.3 8.3 8.4 8.3 8.2 8.3 8.1 8.1 8.1 7.9 7.8 7.9 7.9	### REBRUARY ### 8.2	8.3 8.3 8.2 8.3 8.2 8.1 8.2 8.1 8.0 8.1 8.1 7.8 7.8 7.9 7.9	7.8 7.9 8.0 8.0 8.0 8.1 8.1 6.7 7.7 7.6	7.7 7.9 7.9 8.0 8.0 8.0 8.0 7.6 7.5 7.4 7.2 7.3 7.4	7.7 e7.8 e7.8 e7.9 7.9 8.0 8.0 8.0 8.1 e7.9 e7.7 7.6 7.5 7.4 7.4 7.5	8.4 8.5 8.5 8.5 8.5 8.4 8.4 8.5 8.1 8.1 8.1 8.1 8.1	APRIL 8.2 8.2 8.3 8.3 8.3 8.2 8.2 8.2 7.9 7.9 7.9 8.0 7.9 8.0 8.0	8.3 8.3 8.4 8.4 8.3 8.3 8.3 8.4 8.3 8.2 8.0 7.9 8.0 8.1 8.0	8.6 8.4 8.4 8.2 8.2 8.0 8.0 8.1 8.2 8.3 8.4 8.5 8.5 8.8	MAY 8.4 8.2 8.1 8.0 8.0 7.9 7.9 8.0 8.1 8.1 8.1 8.2 8.3 8.4 8.3 8.4 8.3 8.4 8.3	8.5 8.4 8.3 8.2 8.1 7.9 8.0 8.1 8.2 8.4 8.6 8.4
1 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	8.3 8.3 8.4 8.3 8.2 8.3 8.1 8.1 8.1 7.9 7.8 7.9 7.9 7.9 7.9 7.9	### REBRUARY 8.2	8.3 8.3 8.2 8.3 8.2 8.1 8.2 8.1 8.1 7.8 7.9 7.9 7.9 7.9 7.9 7.9 7.9	7.8 7.9 8.0 8.0 8.0 8.1 8.1 7.7 7.6 7.5 7.4 7.6 7.7 7.8 7.9 8.0	7.7 7.9 8.0 8.0 8.0 8.0 7.6 7.5 7.4 7.2 7.3 7.4 7.4 7.6	7.7 e7.8 e7.9 7.9 8.0 8.0 8.0 8.1 e7.7 7.6 7.5 7.4 7.4 7.4 7.5 7.7	8.4 8.5 8.5 8.5 8.5 8.4 8.4 8.5 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1 8.1	APRIL 8.2 8.2 8.3 8.3 8.3 8.2 8.2 8.2 8.2 7.9 7.9 7.9 8.0 7.9 8.0 8.1 8.1 8.1 8.2 8.2 8.2	8.3 8.3 8.4 8.4 8.3 8.3 8.3 8.4 8.3 8.2 8.0 7.9 8.1 8.0 8.1 8.1 8.2 8.3	8.6 8.4 8.4 8.2 8.2 8.0 8.0 8.1 8.2 8.3 8.4 8.5 8.7 8.8 8.6 8.5 8.3	MAY 8.4 8.2 8.1 8.0 8.0 7.9 7.9 8.0 8.1 8.1 8.1 8.2 8.3 8.4 8.3 8.4 8.3 8.4 8.3 8.1 7.8 7.9 8.1	8.5 8.4 8.2 8.1 7.9 8.1 8.2 8.3 8.4 8.6 8.4 8.3 8.4 8.3 8.2 8.1

07144100 LITTLE ARKANSAS RIVER NEAR SEDGWICK, KS--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			JULY			AUGUST			SEPTEMB	ER
1 2 3 4 5	8.1 7.9 7.8 7.6 7.7	7.7 7.7 7.5 7.5	8.0 7.8 7.6 7.6 7.6	8.5 8.6 8.7 8.9 8.8	8.0 8.1 8.2 8.2 8.3	8.2 8.3 8.4 8.5 8.6	8.7 8.7 8.7 8.7	8.2 8.3 8.3 8.3	8.5 8.5 8.4 8.4	8.3 8.3 8.3 8.3	7.7 7.8 7.9 7.9 7.9	8.0 8.1 8.1 8.1 8.0
6 7 8 9 10	7.3 7.3 7.4 7.3 7.2	7.0 7.0 7.2 7.0 7.1	7.1 7.1 7.3 7.1 7.1	9.0 9.0 8.9 8.7	8.3 8.5 8.5 8.4 8.2	8.7 8.7 8.7 8.5 8.4	8.6 8.6 8.6 8.6	8.4 8.3 8.3 8.2 8.1	8.5 8.4 8.4 8.3	8.2 8.2 8.3 8.3	7.8 7.9 7.8 8.1 8.0	8.0 8.0 8.0 8.2
11 12 13 14 15	7.3 7.5 7.6 7.7 7.8	7.2 7.3 7.5 7.6 7.7	7.2 7.3 7.6 7.7 7.7	8.6 8.5 8.4 8.5 8.5	8.1 8.1 8.1 8.1	8.5 8.4 8.3 8.3	8.5 8.6 8.6 8.7 8.8	8.1 8.1 8.1 8.2	8.3 8.3 8.4 8.4	8.3 8.4 8.4 8.4 8.3	8.0 8.1 8.1 8.0 8.0	8.2 8.2 8.2 8.2
16 17 18 19 20	7.9 8.0 8.0 8.1 7.9	7.8 7.8 7.9 7.9	7.8 7.9 8.0 8.0 7.8	8.6 8.5 8.5 8.5	8.1 8.0 8.0 8.1 8.1	8.4 8.2 8.3 8.3	8.7 8.4 8.5 8.5 8.6	8.1 7.8 8.1 8.1	8.4 8.2 8.1 8.3	8.2 8.2 8.0 7.1 7.0	7.9 8.0 7.0 6.9	8.0 8.1 7.1 6.9 7.0
21 22 23 24 25	7.9 7.3 7.2 7.4 7.7	7.3 7.1 7.1 7.2 7.4	7.6 7.1 7.1 7.3 7.6	8.5 8.6 8.7 8.6 8.7	8.1 8.1 8.1 8.2 8.2	8.4 8.4 8.5 8.5	8.6 8.6 8.5 8.5	8.0 8.1 8.1 8.0 8.0	8.3 8.4 8.4 8.3	7.2 7.3 7.5 7.6 7.6	7.0 7.2 7.3 7.2 7.2	7.1 7.2 7.4 7.6 7.3
26 27 28 29 30 31	7.8 7.9 8.0 8.0	7.7 7.8 7.9 7.9 8.0	7.7 7.8 7.9 8.0 8.0	8.5 8.5 8.2 8.5 8.6 8.6	8.1 8.0 7.8 8.0 8.0	8.4 8.3 8.0 8.2 8.3 8.4	8.4 8.4 8.5 8.5 8.3	8.1 8.1 7.9 8.0 8.1 8.0	8.2 8.2 8.3 8.2 8.2	7.8 7.8 7.8 7.8 7.8	7.3 7.7 7.8 7.8 7.8	7.7 7.8 7.8 7.8 7.8
MAX MIN	8.1 7.2	8.0 7.0	8.0 7.1	9.0 8.2	8.5 7.8	8.7 8.0	8.8 8.3	8.4 7.8	8.5 8.1	8.4 7.0	8.1 6.9	8.2 6.9

e Estimated

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
	OCTOBER				NOVEMBER			DECEMBER			JANUARY		
1 2 3 4 5	19.7 21.0 22.2 21.2 17.5	16.6 17.4 19.0 17.5 14.6	18.2 19.1 20.5 18.9 16.4	17.8 16.5 15.4 13.7 13.9	16.5 14.8 13.5 12.9 13.1	17.4 15.7 14.2 13.3 13.4	5.2 4.4 4.0 4.4 4.1	3.8 3.6 2.6 2.6 2.8	4.1 4.0 3.4 3.6 3.5	.9 .3 .9 1.8 2.1	.1 .0 .0 .2 .4	.4 .2 .4 .9	
6 7 8 9 10	14.6 13.1 12.4 11.8 11.8	11.6 10.3 9.6 8.9 9.2	12.6 11.5 10.9 10.3 10.5	13.9 10.1 9.1 7.4 6.8	10.1 8.4 7.4 5.7 5.2	12.3 9.2 8.2 6.7 6.2	4.5 4.9 5.7 5.5	3.2 2.9 4.5 4.0 2.3	3.8 4.0 5.1 4.8 4.1	2.5 2.9 2.4 2.4 3.4	.6 .8 .6 .4	1.6 1.9 1.7 1.6 2.1	
11 12 13 14 15	14.0 16.8 16.5 18.0 18.6	10.0 12.6 15.2 16.1 17.2	11.9 14.6 15.9 17.0 18.0	6.6 6.6 5.4 5.1 6.7	5.7 5.4 3.6 3.1 4.2	6.2 6.1 4.5 4.3 5.4	2.3 .6 .6 .7	.0 .0 .1 .1	.6 .3 .3 .3	3.6 4.0 3.7 3.8 3.5	2.5 1.6 2.9 2.3 1.4	3.0 2.8 3.3 3.2 2.7	
16 17 18 19 20	19.2 18.6 19.3 19.0 19.0	17.0 16.0 16.5 16.8 16.5	18.2 17.5 18.1 18.1 17.9	6.3 4.4 4.8 5.6 5.2	4.4 2.8 3.1 3.7 4.0	5.4 3.8 4.0 4.6 4.6	.7 .7 .7 .7	.0 .0 .0 .0	.4 .3 .3 .2	3.1 2.3 2.4 2.1	1.5 1.2 .3 .0	2.0 1.8 1.4 .8	
21 22 23 24 25	18.4 17.6 18.9 19.0 18.8	17.4 16.7 17.2 17.9 16.3	17.7 17.1 18.0 18.4 17.2	5.1 4.9 6.2 6.8 6.6	2.9 3.7 4.4 6.0 5.1	4.2 4.4 5.3 6.3 5.9	.8 .9 .8	.1 .1 .1 .1	.3 .4 .3	2.1 2.8 3.8 4.3 3.6	.1 .2 1.8 2.6 1.5	1.1 1.6 2.8 3.5 2.7	
26 27 28 29 30 31	16.8 17.1 18.4 18.5 18.0 17.9	16.1 16.7 17.1 17.3 16.3	16.4 16.8 17.7 17.9 17.2	6.1 6.1 7.3 6.7 5.7	4.4 4.4 5.7 5.3 4.3	5.5 5.4 6.4 6.0 5.1	.5 .8 .9 .8 .9	.2 .2 .2 .1 .1	.3 .4 .5 .4 .5	4.3 3.4 2.6 3.2 3.9 4.4	2.8 1.6 1.2 1.7 2.4 2.6	3.6 2.4 1.9 2.4 3.1 3.5	
MONTH	22.2	8.9	16.4	17.8	2.8	7.3	5.7	.0	1.5	4.4	.0	2.0	

arkansas river basin 385

07144100 LITTLE ARKANSAS RIVER NEAR SEDGWICK, KS--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

211				WAIER (DE								
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX		MEAN	MAX		MEAN
-		FEBRUARY		1.5	MARCH		10.1	APRIL		00.0	MAY	20.2
1 2	3.9 2.7	2.0 .3 1.3 1.8 2.4	3.0 1.6 2.2 3.3 4.1	1.5 2.9	.8	1.1 1.8 e2.7 e3.5 4 4	12.1	10.2	11.1 11.6 14.0 14.5 14.9	23.2 22.1	19.5	20.3
3 4	3.5 4.8	1.3	3.3			e2.7 e3.5	16.4 15.6	14.0	14.0	21.3		20.1
5	3.7	2.1		5.0	J.,		10.2					20.3
7	6.5 8.2	3.9 4.2 4.3 .0	5.3 6.1	5.5 5.2 6.7 8.2	3.7 4.1 3.8 5.5 7.1	4.6 4.6 5.4 6.9	17.2 18.6 19.9 21.0 20.0	16.2 14.6	16.8 16.7	22.3 21.7 22.2 24.0 25.4	18.7 18.4	
8 9	8.3 4.3	4.3	6.9 1.3	6.7 8.2	3.8 5.5	5.4 6.9	19.9 21.0	16.2 18.3	18.1 19.7	22.2 24.0	17.9 18.7	20.1 21.3
10												22.8
11 12	2.5 3.8 4.0 2.8	.0 2.0 2.8 .7	1.1	9.1			18.5 17.2	16.5 14.5	17.9 16.0	24.6 24.7 25.7 26.1 26.6	21.4 20.0	22.5
13 14	4.0 2.8	2.8	3.5 1.8	7.3 9.6 9.7	5.5 6.8	6.4 8.2 9.1	17.8 17.6	14.6 15.1	16.2 16.5	25.7 26.1	20.5	23.2 23.8
15	.,						18.1					24.2
16 17	1.2	.1 .0 .0 .9	.6 .4	7.6 6.3 6.6 7.5 9.0	5.7 4.8	6.3 5.6 6.3 6.9 7.7	17.2 15.3	14.6 12.2	15.5 13.9	28.1 27.3 23.8 23.9 23.4	22.7 23.3	25.4 25.1
18 19	1.4 4.1	.0	.7 2.4	6.6 7.5	5.8 6.3 6.4	6.3 6.9	15.5 16.8	12.5 12.7	14.0 14.7	23.8 23.9	21.5 21.3	22.7 22.7
20	5.1		4.1				19.8				21.8	22.7
21 22	4.6	1.8 .8 1.5 1.9	3.0 2.2 2.1	10.3 12.0 13.2 12.4 10.8	7.9 8.9	9.1 10.5	22.4 21.4 18.0 19.1 21.0	18.3 18.0	20.2 19.5	22.0 19.5	17.8 16.1	19.5 17.9
23 24	2.9	1.5 1.9	2.1 e2.5	13.2	10.0	11.6	18.0	13.9	16.2	21.0 19.8	15.5	18.2 17.5
25			e3.0	10.8	9.1	9.6	21.0	15.4	20.2 19.5 16.2 16.8 18.2	18.9		
26	4.1	3.1 2.6	e3.5	9.6	7.9 8.2	8.9	22.0	17.3	19.6	21.8 21.0 24.7 23.9 21.0 20.2	16.1	18.8 20.2
27 28	2.6	1.1	3.4 1.6	8.2	7.5	7.8	22.5	18.0	20.1	24.7	19.1 18.7	21.4
29 30				9.6 9.5 8.2 10.6 12.6	7.6 9.1	8.9 8.8 7.8 8.9	22.0 22.5 22.5 22.3 20.8	18.2 17.8	19.1	23.9	20.7 19.1	21.7 20.1
31				13.1	11.1	12.0						18.6
MONTH	8.3	.0	2.6	13.2	.8	7.2	22.5	10.2	16.9	28.1	14.5	21.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE	MEAN		JULY	MEAN		MIN AUGUST			MIN SEPTEMBE	
1	20.7	JUNE 17.3	18.9	29.1	JULY 24.5			AUGUST			SEPTEMBE	24.4
1 2 3	20.7 21.8 19.4	JUNE 17.3 18.0 17.7	18.9 19.6 18.0	29.1 29.0 29.7	JULY 24.5 25.3 25.0	26.7 27.1 27.3	30.6 31.1 31.2	AUGUST 26.6 27.5 28.2	28.7 29.3 29.6	26.1 26.6 27.0	SEPTEMBE 22.4 23.4 24.4	24.4 25.0 25.7
1 2	20.7 21.8	JUNE 17.3 18.0	18.9 19.6	29.1 29.0	JULY 24.5 25.3 25.0			AUGUST 26.6 27.5 28.2 27.4			22.4 23.4 24.4 24.6	24.4 25.0 25.7 25.9
1 2 3 4 5	20.7 21.8 19.4 20.3 20.2	JUNE 17.3 18.0 17.7 17.7 18.9	18.9 19.6 18.0 18.6 19.7	29.1 29.0 29.7 30.9 29.7	JULY 24.5 25.3 25.0 25.8 26.4	26.7 27.1 27.3 28.3 27.6	30.6 31.1 31.2 30.6 31.0	AUGUST 26.6 27.5 28.2 27.4 27.6	28.7 29.3 29.6 29.1 29.2	26.1 26.6 27.0 27.2 26.0	22.4 23.4 24.4 24.6 24.3	24.4 25.0 25.7 25.9 25.0
1 2 3 4 5	20.7 21.8 19.4 20.3 20.2 21.8 25.4 25.2	JUNE 17.3 18.0 17.7 17.7 18.9 19.5 21.8 19.4	18.9 19.6 18.0 18.6 19.7 20.3 23.7 22.2	29.1 29.0 29.7 30.9 29.7 30.0 30.7 29.9	JULY 24.5 25.3 25.0 25.8 26.4 25.2 25.9 26.5	26.7 27.1 27.3 28.3 27.6	30.6 31.1 31.2 30.6 31.0	AUGUST 26.6 27.5 28.2 27.4 27.6	28.7 29.3 29.6 29.1 29.2	26.1 26.6 27.0 27.2 26.0	22.4 23.4 24.4 24.6 24.3	24.4 25.0 25.7 25.9 25.0 24.2 23.5 22.2
1 2 3 4 5	20.7 21.8 19.4 20.3 20.2 21.8 25.4	JUNE 17.3 18.0 17.7 17.7 18.9	18.9 19.6 18.0 18.6 19.7	29.1 29.0 29.7	JULY 24.5 25.3 25.0 25.8 26.4 25.2 25.9 26.5	26.7 27.1 27.3 28.3 27.6	30.6 31.1 31.2 30.6 31.0	AUGUST 26.6 27.5 28.2 27.4 27.6	28.7 29.3 29.6 29.1 29.2	26.1 26.6 27.0 27.2 26.0	22.4 23.4 24.4 24.6 24.3	24.4 25.0 25.7 25.9 25.0 24.2 23.5 22.2
1 2 3 4 5 6 7 8	20.7 21.8 19.4 20.3 20.2 21.8 25.4 25.2 21.6 23.8	JUNE 17.3 18.0 17.7 17.7 18.9 19.5 21.8 19.4	18.9 19.6 18.0 18.6 19.7 20.3 23.7 22.2 20.3 22.5	29.1 29.0 29.7 30.9 29.7 30.0 30.7 29.9 31.1 31.5	JULY 24.5 25.3 25.0 25.8 26.4 25.2 25.9 26.5 26.6 27.3	26.7 27.1 27.3 28.3 27.6 27.5 28.3 28.9 29.5	30.6 31.1 31.2 30.6 31.0 31.2 30.5 29.3 27.4	AUGUST 26.6 27.5 28.2 27.4 27.6 27.9 26.9 27.1 27.0 25.0	28.7 29.3 29.6 29.1 29.2 29.4 28.7 28.4 28.0 26.2	26.1 26.6 27.0 27.2 26.0 25.1 24.2 23.4 22.5 22.1	22.4 23.4 24.4 24.6 24.3 23.4 22.7 21.1 19.6 19.0	24.4 25.0 25.7 25.9 25.0 24.2 23.5 22.2
1 2 3 4 5 6 7 8 9 10	20.7 21.8 19.4 20.3 20.2 21.8 25.4 25.2 21.6 23.8	JUNE 17.3 18.0 17.7 17.7 18.9 19.5 21.8 19.4 19.4 21.6 23.8 24.5	18.9 19.6 18.0 18.6 19.7 20.3 23.7 22.2 20.3 22.5 24.5 25.7	29.1 29.0 29.7 30.9 29.7 30.0 30.7 29.9	JULY 24.5 25.3 25.0 25.8 26.4 25.2 25.9 26.5 26.6 27.3	26.7 27.1 27.3 28.3 27.6 27.5 28.3 28.3 28.9 29.5	30.6 31.1 31.2 30.6 31.0 31.2 30.5 29.7 29.3 27.4 26.1 28.5	AUGUST 26.6 27.5 28.2 27.4 27.6 27.9 26.9 27.1 27.0 25.0 23.7 23.6	28.7 29.3 29.6 29.1 29.2 29.4 28.7 28.4 28.0 26.2 24.9 25.9	26.1 26.6 27.0 27.2 26.0 25.1 24.2 23.4 22.5 22.1	22.4 23.4 24.6 24.3 23.4 22.7 21.1 19.6 19.0	24.4 25.0 25.7 25.9 25.0 24.2 23.5 22.2 21.1 20.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14	20.7 21.8 19.4 20.3 20.2 21.8 25.4 25.2 21.6 23.8 25.2 27.3 27.3 26.5	JUNE 17.3 18.0 17.7 17.7 18.9 19.5 21.8 19.4 19.4 21.6 23.8 24.5 24.3	18.9 19.6 18.0 19.7 20.3 23.7 22.2 20.3 22.5 24.5 25.5 26.1 25.0	29.1 29.0 29.7 30.9 29.7 30.0 30.7 29.9 31.1 31.5 30.5 29.1 27.9	JULY 24.5 25.3 25.0 25.8 26.4 25.2 25.9 26.5 26.6 27.3 27.7 27.4 26.0 24.5	26.7 27.1 27.3 28.3 27.6 27.5 28.3 28.9 29.5 29.7 28.9 27.4 26.3	30.6 31.1 31.2 30.6 31.0 31.2 30.5 29.7 29.3 27.4 26.1 28.5 29.2 28.3	AUGUST 26.6 27.5 28.2 27.4 27.6 27.9 26.9 27.1 27.0 25.0 23.7 23.6 24.8 25.0	28.7 29.3 29.6 29.1 29.2 29.4 28.7 28.4 28.0 26.2 24.9 25.9 26.9	26.1 26.6 27.0 27.2 26.0 25.1 24.2 23.4 22.5 22.1 22.2 23.8 24.4 23.7	22.4 23.4 24.6 24.3 23.4 22.7 21.1 19.6 19.0 19.7 20.5 21.5 21.8	24.4 25.0 25.7 25.9 25.0 24.2 23.5 22.2 21.1 20.7 21.1 22.1 23.0 22.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	20.7 21.8 19.4 20.3 20.2 21.8 25.4 25.2 21.6 23.8 25.2 27.3 27.3 26.5 25.4	JUNE 17.3 18.0 17.7 17.7 18.9 19.5 21.8 19.4 19.4 21.6 23.8 24.5 24.9 24.3	18.9 19.6 18.0 19.7 20.3 23.7 22.2 20.3 22.5 24.5 25.7 26.1 25.0 23.9	29.1 29.0 29.7 30.9 29.7 30.0 30.7 29.9 31.1 31.5 30.5 29.1 27.9 27.3	JULY 24.5 25.3 25.0 25.8 26.4 25.2 25.9 26.5 26.6 27.3 27.7 27.4 26.0 24.5 24.2	26.7 27.1 27.3 28.3 27.6 27.5 28.3 28.3 28.9 29.5 29.7 28.9 27.4 26.3 25.6	30.6 31.1 31.2 30.6 31.0 31.2 30.5 29.7 29.3 27.4 26.1 28.5 29.2 28.3 28.5	AUGUST 26.6 27.5 28.2 27.4 27.6 27.9 26.9 27.1 27.0 25.0 23.7 23.6 24.8 25.0 25.1	28.7 29.3 29.6 29.1 29.2 29.4 28.7 28.4 28.0 26.2 24.9 25.9 26.9 26.6 26.2	26.1 26.6 27.0 27.2 26.0 25.1 24.2 23.4 22.5 22.1 22.2 23.8 24.4 23.7 23.1	22.4 23.4 24.6 24.3 23.4 22.7 21.1 19.6 19.0 19.7 20.5 21.5 21.8 21.7	24.4 25.0 25.7 25.9 25.0 24.2 23.5 22.2 21.1 20.7 21.1 22.1 23.0 22.9 22.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	20.7 21.8 19.4 20.3 20.2 21.8 25.4 25.2 21.6 23.8 25.2 27.3 27.3 27.3 26.5 4 25.4	JUNE 17.3 18.0 17.7 17.7 18.9 19.5 21.8 19.4 19.4 21.6 23.8 24.5 24.9 24.3 22.3	18.9 19.6 18.0 18.6 19.7 20.3 23.7 22.2 20.3 22.5 24.5 25.7 26.1 25.0 23.9	29.1 29.0 29.7 30.9 29.7 30.0 30.7 29.9 31.1 31.5 30.5 29.1 27.9 27.3	JULY 24.5 25.3 25.0 25.8 26.4 25.2 25.9 26.6 27.3 27.7 27.4 26.0 24.5 24.2 24.2	26.7 27.1 27.3 28.3 27.6 27.5 28.3 28.9 29.5 29.7 28.9 27.4 26.3 25.6	30.6 31.1 31.2 30.6 31.0 31.2 30.5 29.7 29.3 27.4 26.1 28.5 29.2 28.3 28.5	AUGUST 26.6 27.5 28.2 27.4 27.6 27.9 26.9 27.1 27.0 25.0 23.7 23.6 24.8 25.0 25.1	28.7 29.3 29.6 29.1 29.2 29.4 28.7 28.0 26.2 24.9 25.9 26.9 26.6 26.2	26.1 26.6 27.0 27.2 26.0 25.1 24.2 23.4 22.5 22.1 22.2 23.8 24.4 23.7 23.1	SEPTEMBE 22.4 23.4 24.6 24.3 23.4 22.7 21.1 19.6 19.0 19.7 20.5 21.5 21.8 21.7 21.2 21.1	24.4 25.0 25.7 25.9 25.0 24.2 23.5 22.2 21.1 20.7 21.1 22.1 22.1 22.2 22.2 21.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	20.7 21.8 19.4 20.3 20.2 21.8 25.4 25.5 21.6 23.8 25.2 27.3 26.5 25.4 25.6 26.4 25.4 25.4	JUNE 17.3 18.0 17.7 17.7 18.9 19.5 21.8 19.4 19.4 21.6 23.8 24.5 24.9 24.3 22.3 22.4 23.1 22.8	18.9 19.6 18.0 18.6 19.7 20.3 23.7 22.2 20.3 22.5 24.5 25.0 23.9 24.1 24.8 24.4 24.5	29.1 29.0 29.7 30.9 29.7 30.0 30.7 31.1 31.5 31.5 30.5 29.1 27.9 27.3 29.6 30.7 31.6	JULY 24.5 25.3 25.0 25.8 26.4 25.2 25.9 26.5 26.6 27.3 27.7 27.4 26.0 24.5 24.2 25.9 27.3	26.7 27.1 27.3 28.3 27.6 27.5 28.3 28.9 29.5 29.7 28.9 27.4 26.3 25.6 26.6 28.2 29.5	30.6 31.1 31.2 30.6 31.0 31.2 30.5 29.7 29.3 27.4 26.1 28.5 29.2 28.3 28.6 26.6 28.0 27.0	AUGUST 26.6 27.5 28.2 27.4 27.6 27.9 26.9 27.1 27.0 25.0 23.7 23.6 24.8 25.0 25.1 24.1 24.2 24.4	28.7 29.3 29.6 29.1 29.2 29.4 28.7 28.0 26.2 24.9 25.9 26.6 26.2 25.6	26.1 26.6 27.0 27.2 26.0 25.1 24.2 23.4 22.5 22.1 22.2 23.8 24.4 23.7 23.1 21.9 23.5 22.5	22.4 23.4 24.6 24.3 23.4 22.7 21.1 19.6 19.0 19.7 20.5 21.5 21.5 21.7 21.2 21.1 14.4	24.4 25.0 25.7 25.9 25.0 24.2 23.5 22.1 20.7 21.1 22.1 23.0 22.9 22.3 21.6 22.0 18.6 18.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	20.7 21.8 19.4 20.3 20.2 21.8 25.4 25.2 21.6 23.8 25.2 27.3 26.5 25.4 25.6 25.4 25.4 25.4 25.4	JUNE 17.3 18.0 17.7 17.7 18.9 19.5 21.8 19.4 19.4 21.6 23.8 24.5 24.9 24.3 22.3 22.4 23.1 22.8 23.1	18.9 19.6 18.0 19.7 20.3 23.7 22.5 24.5 25.7 26.1 25.0 23.9 24.1 24.8 24.4 24.5 23.7	29.1 29.0 29.7 30.9 29.7 30.0 30.7 29.9 31.1 31.5 30.5 29.1 27.9 27.3 29.6 30.7 31.6 30.6	JULY 24.5 25.3 25.0 25.8 26.4 25.2 25.9 26.5 26.6 27.3 27.7 27.4 26.0 24.5 24.2 25.9 27.3 27.3	26.7 27.1 27.3 28.3 27.6 27.5 28.3 28.9 29.5 29.7 28.9 27.4 26.3 25.6 26.6 28.2 29.5 28.5 28.5	30.6 31.1 31.2 30.6 31.0 31.2 30.5 29.7 29.3 27.4 26.1 28.5 29.2 28.3 28.5 28.6 26.6 28.0 27.0	AUGUST 26.6 27.5 28.2 27.4 27.6 27.9 26.9 27.1 27.0 25.0 23.7 23.6 24.8 25.0 25.1 24.1 24.2 24.4 24.3 23.8	28.7 29.3 29.6 29.1 29.2 29.4 28.7 28.4 28.0 26.2 24.9 26.9 26.6 26.2 25.6 26.2 25.6 26.2	26.1 26.6 27.0 27.2 26.0 25.1 24.2 23.4 22.5 22.1 22.2 23.8 24.4 23.7 23.1 21.9 23.5 22.5 19.1 20.2	22.4 23.4 24.6 24.3 23.4 22.7 21.1 19.6 19.0 19.7 20.5 21.5 21.8 21.7 21.1 4.4 18.6 18.5	24.4 25.0 25.7 25.9 25.0 24.2 23.5 22.2 21.1 20.7 21.1 22.1 23.0 22.9 22.3 21.6 22.0 18.6 18.9 19.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	20.7 21.8 19.4 20.3 20.2 21.8 25.4 25.2 21.6 23.8 25.2 27.3 27.3 27.3 26.5 25.4 25.9 25.4 25.9 24.7 23.0	JUNE 17.3 18.0 17.7 17.7 18.9 19.5 21.8 19.4 19.4 21.6 23.8 24.5 24.9 24.3 22.3 22.4 23.1 22.8 23.1 22.8 23.1 22.8 23.1	18.9 19.6 18.6 19.7 20.3 23.7 22.2 20.3 22.5 24.5 25.7 26.1 25.0 23.9 24.1 24.8 24.4 24.5 23.7	29.1 29.0 29.7 30.9 29.7 30.0 30.7 29.9 31.1 31.5 30.5 29.1 27.9 27.3 29.6 30.7 31.6 30.5	JULY 24.5 25.3 25.0 25.8 26.4 25.2 25.9 26.5 26.6 27.3 27.7 27.4 26.0 24.5 24.2 25.9 27.3 27.7 27.4 26.0 24.5 24.2	26.7 27.1 27.3 28.3 27.6 27.5 28.3 28.9 29.5 29.7 28.9 27.4 26.3 25.6 26.6 28.2 29.5 28.5 28.5	30.6 31.1 31.2 30.6 31.0 31.2 30.5 29.3 27.4 26.1 28.5 29.2 28.3 28.5 28.6 26.6 28.0 27.5	AUGUST 26.6 27.5 28.2 27.4 27.6 27.9 26.9 27.1 27.0 25.0 23.7 23.6 24.8 25.0 25.1 24.1 24.2 24.4 24.3 23.8	28.7 29.3 29.6 29.1 29.2 29.4 28.7 28.0 26.2 24.9 25.9 26.6 26.2 25.6 26.2 25.6 26.2 25.6	26.1 26.6 27.0 27.2 26.0 25.1 24.2 23.4 22.5 22.1 22.2 23.8 24.4 23.7 23.1 21.9 23.5 22.5 19.1 20.2	SEPTEMBE 22.4 23.4 24.6 24.3 23.4 22.7 21.1 19.6 19.0 19.7 20.5 21.5 21.5 21.8 21.7 21.2 21.1 14.4 18.6 18.5 19.5 20.2	24.4 25.0 25.7 25.9 25.0 24.2 23.5 22.2 21.1 20.7 21.1 22.1 22.1 22.3 22.3 22.3 22.3 22.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	20.7 21.8 19.4 20.3 20.2 21.8 25.4 25.2 21.6 23.8 25.2 27.3 26.5 25.4 25.4 25.4 25.4 25.4 25.4 25.4 25	JUNE 17.3 18.0 17.7 17.7 18.9 19.5 21.8 19.4 19.4 21.6 23.8 24.5 24.9 24.3 22.3 22.4 23.1 22.8 23.1 22.3	18.9 19.6 18.0 18.6 19.7 20.3 22.2 20.3 22.5 24.5 25.0 23.9 24.1 25.0 23.9 24.1 24.4 24.5 23.7 22.9 21.8 22.9 21.8	29.1 29.0 29.7 30.9 29.7 30.0 30.7 29.9 31.1 31.5 30.5 29.1 27.9 27.3 29.6 30.7 31.6 30.5	JULY 24.5 25.3 25.0 25.8 26.4 25.2 25.9 26.6 27.3 27.7 27.4 26.0 24.5 24.2 25.9 27.3 26.0 26.8 27.4 27.0	26.7 27.1 27.3 28.3 27.6 27.5 28.3 28.9 29.5 29.7 28.9 27.4 26.3 25.6 26.6 28.2 29.5 28.2 29.5 28.2	30.6 31.1 31.2 30.6 31.0 31.2 30.5 29.7 29.3 27.4 26.1 28.5 29.2 28.3 28.5 28.6 26.6 27.0 27.5 27.4 26.7	AUGUST 26.6 27.5 28.2 27.4 27.6 27.9 26.9 27.1 27.0 25.0 23.7 23.6 24.8 25.0 25.1 24.1 24.2 24.4 24.3 23.8	28.7 29.3 29.6 29.1 29.2 29.4 28.7 28.0 26.2 24.9 25.9 26.6 26.2 25.6 26.2 25.6 26.2 25.8 25.6	26.1 26.6 27.0 27.2 26.0 25.1 24.2 23.4 22.5 22.1 22.2 23.8 24.4 23.7 23.1 21.9 23.5 22.5 29.1 20.2	SEPTEMBE 22.4 23.4 24.6 24.3 23.4 22.7 21.1 19.6 19.0 19.7 20.5 21.5 21.5 21.8 21.7 21.2 21.1 14.4 18.6 18.5 19.5 20.2 19.3 18.1	24.4 25.0 25.7 25.9 25.0 24.2 23.5 22.2 21.1 20.7 21.1 22.1 23.0 22.9 22.3 21.6 22.0 18.6 18.9 19.3 20.2 21.3 20.2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	20.7 21.8 19.4 20.3 20.2 21.8 25.4 25.2 21.6 23.8 25.2 27.3 26.5 25.4 25.6 25.4 25.9 25.4 25.9 25.4 24.9 25.4 26.4 26.4 26.4 26.4 27.3 26.5 26.4 26.4 27.3 26.4 26.4 26.4 26.4 26.4 26.4 26.4 26.4	JUNE 17.3 18.0 17.7 17.7 18.9 19.5 21.8 19.4 19.4 21.6 23.8 24.5 24.9 24.3 22.3 22.4 23.1 22.8 23.1 22.8 23.1 22.8 23.1 22.8 23.1 22.8 23.1 22.8	18.9 19.6 18.6 19.7 20.3 23.7 22.2 20.3 22.5 24.5 25.7 26.1 25.0 23.9 24.1 24.8 24.4 24.5 23.7 22.9 21.8 23.3 24.4 24.6	29.1 29.0 29.7 30.9 29.7 30.0 30.7 29.9 31.1 31.5 30.5 29.1 27.9 27.3 29.6 30.7 31.6 30.5 30.5 30.5	JULY 24.5 25.3 25.0 25.8 26.4 25.2 25.9 26.6 27.3 27.7 27.4 26.0 24.5 24.2 25.9 27.3 27.3 26.0 26.8 27.3	26.7 27.1 27.3 28.3 27.6 27.5 28.3 28.9 29.5 29.7 28.9 27.4 26.6 26.6 28.2 29.5 28.5 28.2	30.6 31.1 31.2 30.6 31.0 31.2 30.5 29.7 29.3 27.4 26.1 28.5 29.2 28.3 28.5 28.6 26.6 28.0 27.0 27.5	AUGUST 26.6 27.5 28.2 27.4 27.6 27.9 26.9 27.1 27.0 25.0 23.7 23.6 24.8 25.0 25.1 24.1 24.2 24.4 24.3 23.8 24.2 24.4 23.8 24.6	28.7 29.3 29.6 29.1 29.2 29.4 28.7 28.0 26.2 24.9 25.9 26.6 26.2 25.6 26.2 25.6 25.8 25.6 25.6 25.7 26.2	26.1 26.6 27.0 27.2 26.0 25.1 24.2 23.4 22.5 22.1 22.2 23.8 24.4 23.7 23.1 21.9 23.5 22.5 19.1 20.2	22.4 23.4 24.6 24.3 23.4 22.7 21.1 19.6 19.0 19.7 20.5 21.5 21.8 21.7 21.2 21.1 14.4 18.6 18.5 19.5 20.2 19.3 18.1 16.8	24.4 25.0 25.7 25.9 25.0 24.2 23.5 22.2 21.1 20.7 21.1 22.1 23.0 22.9 22.3 21.6 22.9 22.3 21.6 22.0 21.1 23.0 22.9 22.3 21.1 23.0 22.9 22.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 25 26 27	20.7 21.8 19.4 20.3 20.2 21.8 25.4 25.2 21.6 23.8 25.3 27.3 26.5 25.4 25.6 26.4 25.9 24.7 23.0 24.3 25.3 26.0	JUNE 17.3 18.0 17.7 17.7 18.9 19.5 21.8 19.4 19.4 21.6 23.8 24.5 24.3 22.3 22.4 23.1 22.8 23.1 22.8 23.1 22.8 23.1 22.8 23.1 22.8 23.1 22.8 23.1 22.8 23.1 22.8 23.1 22.8 23.1 23.5 23.5	18.9 19.6 18.6 19.7 20.3 23.7 22.5 24.5 25.7 26.1 25.0 23.9 24.1 24.8 24.4 24.5 23.7 22.9 21.8 23.3 24.6	29.1 29.0 29.7 30.9 29.7 30.0 30.7 29.9 31.1 31.5 30.5 29.1 27.9 27.3 29.6 30.7 31.6 30.6 30.5 30.5 30.5 30.5	JULY 24.5 25.3 25.0 25.8 26.4 25.2 25.9 26.5 26.6 27.3 27.7 27.4 26.0 24.5 24.2 25.9 27.3 27.7 27.3 27.7 27.4 26.0	26.7 27.1 27.3 28.3 27.6 27.5 28.3 28.9 29.5 29.7 28.9 27.4 26.3 25.6 26.6 28.2 29.5 28.5 28.2	30.6 31.1 31.2 30.6 31.0 31.2 30.5 29.7 29.3 27.4 26.1 28.5 29.2 28.3 28.5 28.6 26.6 28.0 27.0 27.5	AUGUST 26.6 27.5 28.2 27.4 27.6 27.9 26.9 27.1 27.0 25.0 23.7 23.6 24.8 25.0 25.1 24.1 24.2 24.4 24.3 23.8 24.2 24.4 24.3 23.8	28.7 29.3 29.6 29.1 29.2 29.4 28.7 28.0 26.2 24.9 25.9 26.6 26.2 25.6 26.2 25.6 26.2 25.6 26.2 25.6	26.1 26.6 27.0 27.2 26.0 25.1 24.2 23.4 22.5 22.1 22.2 23.8 24.4 23.7 23.1 21.9 23.5 22.5 22.1 21.9 23.5 22.1 21.9 23.5 22.1 21.9 23.5 22.5 23.6 23.6 23.6 23.6 23.6 23.6 23.6 23.6	22.4 23.4 24.6 24.3 23.4 22.7 21.1 19.6 19.0 19.7 20.5 21.5 21.5 21.8 21.7 21.2 21.1 14.4 18.6 18.5 19.5 20.2 19.3 18.1 16.8	24.4 25.0 25.7 25.9 25.0 24.2 23.5 22.2 21.1 20.7 21.1 22.0 22.9 22.3 21.6 22.0 18.6 18.9 19.3 20.7 19.3
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	20.7 21.8 19.4 20.3 20.2 21.8 25.4 25.2 21.6 23.8 25.2 27.3 26.5 25.4 25.6 26.4 25.9 24.7 23.0 24.3 26.0 24.3 26.0 26.0 26.0 26.0 26.0 26.0 26.0 26.0	JUNE 17.3 18.0 17.7 17.7 18.9 19.5 21.8 19.4 19.4 21.6 23.8 24.5 24.3 22.3 22.4 23.1 22.8 23.1 22.8 23.1 22.8 23.1 22.8 23.1 22.8 23.1 22.8 23.1 22.8 23.1 22.8 23.1 22.8 23.1 23.8	18.9 19.6 18.6 19.7 20.3 23.7 22.5 24.5 25.7 26.1 25.0 23.9 24.1 24.8 24.4 24.5 23.7 22.9 21.8 23.3 24.6 24.9 25.2 26.3 25.7	29.1 29.0 29.7 30.9 29.7 30.0 30.7 29.9 31.1 31.5 30.5 29.1 27.9 27.3 29.6 30.7 31.6 30.6 30.5 30.5 30.5 30.5 30.5 30.5 30.7 31.6 30.7 31.6 30.7 31.6 30.7 31.6 30.7 31.6 30.7 31.6 30.7 31.6 30.7 31.6 30.7 31.6 30.7 30.7 30.7 30.7 30.7 30.7 30.7 30.7	JULY 24.5 25.3 25.0 25.8 26.4 25.2 25.9 26.5 26.6 27.3 27.7 27.4 26.0 24.5 24.2 25.9 27.7 27.3 26.8 27.7 27.4 26.0	26.7 27.1 27.3 28.3 27.6 27.5 28.3 28.9 29.5 29.7 28.9 27.4 26.3 25.6 26.6 28.2 29.5 28.5 28.5 28.2 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29	30.6 31.1 31.2 30.6 31.0 31.2 30.5 29.7 29.3 27.4 26.1 28.5 29.3 28.5 28.6 26.6 28.0 27.0 27.5 27.4 26.7 27.1 28.0	AUGUST 26.6 27.5 28.2 27.4 27.6 27.9 26.9 27.1 27.0 25.0 23.7 23.6 24.8 25.1 24.1 24.2 24.4 24.3 23.8 24.2 24.4 24.8 24.6 25.4 24.6	28.7 29.3 29.6 29.1 29.2 29.4 28.7 28.0 26.2 24.9 25.9 26.6 26.2 25.6 26.2 25.6 26.2 25.6 26.2 25.7 26.2 25.7 26.2	26.1 26.6 27.0 27.2 26.0 25.1 24.2 23.4 22.5 22.1 22.2 23.8 24.4 23.7 23.1 21.9 23.5 22.5 22.1 21.9 23.5 22.5 22.1 21.9 23.5 22.5 22.1 20.2	22.4 23.4 24.6 24.3 23.4 22.7 21.1 19.6 19.0 19.7 20.5 21.5 21.5 21.8 21.7 21.2 21.1 14.4 18.6 18.5 19.5 20.2 19.3 18.1 16.8 16.7 16.8 17.6 8 17.6 17.8	24.4 25.0 25.7 25.9 25.0 24.2 23.5 22.2 21.1 20.7 21.1 23.0 22.9 22.3 21.6 22.0 18.6 18.9 19.3 20.7 19.3 20.7 19.0 19.3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	20.7 21.8 19.4 20.3 20.2 21.8 25.4 221.6 23.8 25.2 27.3 26.5 25.4 25.4 25.4 25.4 25.4 25.4 25.4 25	JUNE 17.3 18.0 17.7 17.7 18.9 19.5 21.8 19.4 21.6 23.8 24.5 24.9 24.3 22.3 22.4 23.1 22.8 23.1 22.3 21.4 20.7 22.2 23.6 23.4 23.5 24.5 24.5 23.6 23.4	18.9 19.6 18.0 18.6 19.7 20.3 22.5 24.5 25.0 23.9 24.1 25.0 23.9 24.1 24.4 24.5 23.7 22.9 21.8 24.4 24.6 24.9 25.0 25.0 25.0 26.0 27.0 27.0 27.0 27.0 27.0 27.0 27.0 27	29.1 29.0 29.7 30.9 29.7 30.0 30.7 29.9 31.1 31.5 30.5 29.1 27.9 27.3 29.6 30.7 31.6 30.5 30.5 30.9 31.0 30.6 30.5	JULY 24.5 25.3 25.0 25.8 26.4 25.2 25.9 26.5 26.6 27.3 27.7 27.4 26.0 24.5 24.2 25.9 27.3 26.8 27.4 27.0 26.8 27.4 27.0 26.8 27.4 27.0 26.8 27.7 26.8 25.4 26.5 27.7	26.7 27.1 27.3 28.3 27.6 27.5 28.3 28.9 29.5 29.7 27.4 26.3 25.6 26.6 28.2 29.5 28.2 29.5 28.2 29.5 28.2 29.5 28.3 27.5 28.3 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5	30.6 31.1 31.2 30.6 31.0 31.2 30.5 29.7 29.3 27.4 26.1 28.5 29.2 28.3 28.5 28.6 26.6 27.0 27.5 27.4 26.7 27.4 26.7 27.5 28.0	AUGUST 26.6 27.5 28.2 27.4 27.6 27.9 26.9 27.1 27.0 25.0 23.7 23.6 24.8 25.0 25.1 24.1 24.2 24.4 24.3 23.8 24.2 24.2 24.4 23.8 24.6	28.7 29.3 29.6 29.1 29.2 29.4 28.7 28.0 26.2 24.9 25.9 26.6 26.2 25.6 26.2 25.8 25.6 25.8 25.6 26.2 25.6 26.2 25.6 26.2	26.1 26.6 27.0 27.2 26.0 25.1 24.2 23.4 22.5 22.1 22.2 23.8 24.4 23.7 23.1 21.9 23.5 22.1 21.9 23.5 22.1 21.9 22.5 22.1 21.9 22.5 22.1 20.2 20.9 22.6 20.0 20.0 20.0 20.0 20.0 20.0 20.0	22.4 23.4 24.6 24.3 23.4 22.7 21.1 19.6 19.0 19.7 20.5 21.8 21.7 21.2 21.1 14.4 18.6 18.5 19.5 20.2 19.3 18.1 16.8 16.7 16.8 17.6 17.8 17.3	24.4 25.0 25.7 25.9 25.0 24.2 23.5 22.2 21.1 20.7 21.1 22.0 22.9 22.3 21.6 22.9 22.3 21.6 22.9 22.3 21.6 22.0 18.6 18.9 19.3 20.2 21.3 20.7

e Estimated

07144100 LITTLE ARKANSAS RIVER NEAR SEDGWICK, KS--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

							JC10BER 2000					
DAY	MAX	MIN						MIN		MAX		MEAN
		OCTOBER		N			DE				JANUARY	
1 2	13.8	9.1 8.9 10.1	11.6 12.3 13.7 12.6 11.6	7.6	7.4	7.5	13.3 14.1 14.5 15.0 15.8	11.1	12.2	19.1	14.4 15.0	16.7
3 4 5	16.8 14.6 13.7	9.5 9.3	12.6	8.6	8.5	8.5	15.0	11.9	13.2	19.3 19.7	14.7 15.0 15.1	17.0
6	16.3										14.9	
7	16.1	9.4 12.6 12.2 11.8 11.4	14.7	9.2	8.5	8.9	16.1 16.4 16.8 16.3 14.8	12.0	13.7	19.2	14.6	
9	16.0 15.5 14.7	11.8	14.4	10.0	9.4	9.8	16.3	11.9	13.9	19.1	14.7 14.7 14.6	16.5
10 11	14.7											
12	14.2	10.6 8.9 8.1 6.9 6.9	11.7	10.3 10.5 11.2 11.3 11.2	10.1	10.2	16.8 17.9 16.5 16.7 16.3	14.4	15.9	18.6	13.8	15.9
13 14	14.7	6.9	10.8	11.3	11.0	11.2	16.7	13.6	14.9	17.5	13.5 12.7 13.5	14.3
15 16	15.0											
17	13.4	7.0 6.2 6.7	10.6 9.9 10.5 10.9 10.6	11.6	11.0	11.3	17.6 18.2 17.7 17.9 18.1	14.9	16.3	18.0	13.6	15.5
18 19	14.2	6.7 7.3 6.8	10.5	11.7	11.4	11.5	17.7	14.8	16.1	17.8	13.9	15.7
20 21												
1.7.	11.6	6.6 6.1 5.1 5.6	8.1	11.8 11.4 11.1 10.9 11.3	11.1	11.0	18.8 19.2 19.6 	15.5	17.1			
24	11.4	5.6	6.5	10.9	10.8	10.7	19.6			15.1	11.4	13.2
25				11.3								
26 27	7.0	6.4	6.6	11.9	10.7	11.1				16.8	11.4	14.1
28 29	7.4 7.5	7.0	7.4	12.0	10.6	11.2	18.8	14.4	16.4	14.8	12.2	13.9 13.2
30 31	7.5 7.7	7.2 7.4	7.4 7.5	13.2	10.9	11.9	18.8 19.0 18.5	$14.6 \\ 14.7$	16.6 16.4	13.9 13.7	11.4 11.5	12.5 12.4
MONTH	16.8	5.6 6.4 7.0 7.2 7.2 7.4	10.6	13.2		10.3			15.0		11.4	15.2
DAY		MIN		MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX		MEAN	MAX	MIN MARCH	MEAN		MIN APRIL	MEAN	MAX	MIN MAY	MEAN
1	MAX	MIN FEBRUARY	MEAN	MAX	MARCH		i	APRIL			MAY	
1 2 3	MAX 13.7 14.3 14.0	MIN FEBRUARY	MEAN	MAX	MARCH		i	APRIL			MAY	 10.4 9.7
1 2	MAX	MIN FEBRUARY	MEAN	MAX	MARCH			APRIL			MAY	 10.4 9.7 9.4
1 2 3 4 5	MAX 13.7 14.3 14.0 14.3 14.3	MIN FEBRUARY 11.8 12.5 12.5 12.5 12.2	MEAN 12.6 13.2 13.1 13.0 12.8	MAX 12.1 11.5	MARCH 12.1 11.2	12.1 11.4	11.9 11.4 13.4 12.6 12.5	9.6 9.6 9.4 9.0 9.1	10.6 10.4 11.1 10.6 10.6	15.6 14.9 12.5 12.4 10.9	MAY 6.9 7.0 7.4 7.5	10.4 9.7 9.4 8.8
1 2 3 4 5	MAX 13.7 14.3 14.0 14.3 14.1 11.1	MIN FEBRUARY 11.8 12.5 12.5 12.5 12.2	MEAN 12.6 13.2 13.1 13.0 12.8	MAX 12.1 11.5	MARCH 12.1 11.2	12.1 11.4	11.9 11.4 13.4 12.6 12.5	9.6 9.6 9.4 9.0 9.1	10.6 10.4 11.1 10.6 10.6	15.6 14.9 12.5 12.4 10.9	MAY 6.9 7.0 7.4 7.5	10.4 9.7 9.4 8.8
1 2 3 4 5	MAX 13.7 14.3 14.0 14.3 14.3	MIN FEBRUARY 11.8 12.5 12.5 12.5 12.2	MEAN 12.6 13.2 13.1 13.0 12.8	MAX 12.1 11.5	MARCH 12.1 11.2	12.1 11.4	11.9 11.4 13.4 12.6 12.5	9.6 9.6 9.4 9.0 9.1	10.6 10.4 11.1 10.6 10.6		MAY 6.9 7.0 7.4 7.5	10.4 9.7 9.4 8.8
1 2 3 4 5 6 7 8 9 10	MAX 13.7 14.3 14.0 14.3 14.1 11.1 12.8 13.2	MIN FEBRUARY 11.8 12.5 12.5 12.2 11.9 11.1 11.0 9.7 10.5 12.8	MEAN 12.6 13.2 13.1 13.0 12.8 12.3 12.2 10.3 11.9 13.0	12.1 11.5 11.6 11.5 11.3	MARCH 12.1 11.2 11.3 11.3 10.9 10.6	12.1 11.4 11.5 11.4 11.3	11.9 11.4 13.4 12.6 12.5 10.9 11.9 11.7 12.5 9.6	9.6 9.6 9.4 9.0 9.1 8.5 8.4 8.2 7.7	10.6 10.4 11.1 10.6 10.6 9.6 9.7 9.7 9.9 8.6	15.6 14.9 12.5 12.4 10.9 9.2 7.7 8.4 9.2 9.9	MAY 6.9 7.0 7.4 7.5 7.3 7.3 7.7 7.5	10.4 9.7 9.4 8.8 8.1 7.5 7.9 8.3 8.5
1 2 3 4 5 6 7 8 9 10	MAX 13.7 14.3 14.0 14.3 14.1 11.1 12.8 13.2 13.5 13.0 12.5	MIN FEBRUARY 11.8 12.5 12.5 12.2 11.9 11.1 11.0 9.7 10.5 12.8 12.6 12.1 12.0	MEAN 12.6 13.2 13.1 13.0 12.8 12.3 11.9 13.0 13.1 12.6 12.1	12.1 11.5 11.6 11.5 11.3 	MARCH 12.1 11.2 11.3 11.3 10.9 10.6 10.8	12.1 11.4 11.5 11.4 11.3 11.0 	11.9 11.4 13.4 12.6 12.5 10.9 11.9 11.7 12.5 9.6 8.1 8.5 8.3	9.6 9.6 9.4 9.0 9.1 8.5 8.4 8.2 7.7 7.7	10.6 10.4 11.1 10.6 10.6 9.6 9.9 9.7 9.9 8.6 7.7 8.0 8.1	15.6 14.9 12.5 12.4 10.9 9.2 7.7 8.4 9.2 9.9	MAY 6.9 7.0 7.4 7.5 7.3 7.3 7.3 7.7 7.5 7.8 8.1 8.2	10.4 9.7 9.4 8.8 8.1 7.5 7.9 8.3 8.5 9.3 10.2
1 2 3 4 5 6 7 8 9 10	MAX 13.7 14.3 14.0 14.3 14.1 11.1 11.1 11.1 12.8 13.2	MIN FEBRUARY 11.8 12.5 12.5 12.2 11.9 11.1 11.0 9.7 10.5 12.8 12.6 12.1	MEAN 12.6 13.2 13.1 13.0 12.8 12.3 12.2 10.3 11.9 13.0 13.1 12.6	12.1 11.5 11.6 11.5 11.3	MARCH 12.1 11.2 11.3 11.3 10.9 10.6	12.1 11.4 11.5 11.4 11.3 11.0	11.9 11.4 13.4 12.6 12.5 10.9 11.9 11.7 12.5 9.6	9.6 9.6 9.4 9.0 9.1 8.5 8.4 7.7 7.7	10.6 10.4 11.1 10.6 10.6 9.6 9.9 9.7 9.9 8.6 7.7	15.6 14.9 12.5 12.4 10.9 9.2 7.7 8.4 9.2 9.9	MAY 6.9 7.0 7.4 7.5 7.3 7.3 7.3 7.7 7.5	10.4 9.7 9.4 8.8 8.1 7.5 7.9 8.3 8.5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	MAX 13.7 14.3 14.0 14.3 14.1 11.1 12.8 13.2 13.5 13.0 12.5 13.0 14.4	MIN FEBRUARY 11.8 12.5 12.5 12.2 11.9 11.1 11.0 9.7 10.5 12.8 12.6 12.1 12.0 12.5 13.4	MEAN 12.6 13.2 13.1 13.0 12.8 12.3 11.9 13.0 13.1 12.6 12.1 12.9 13.8 14.2	12.1 11.5 11.6 11.5 11.3 11.3 11.3 10.4	MARCH 12.1 11.2 11.3 11.3 10.9 10.6 10.8 10.4 9.7 10.0	12.1 11.4 11.5 11.4 11.3 11.0 11.0 10.9 10.0	11.9 11.4 13.4 12.6 12.5 10.9 11.9 11.7 12.5 9.6 8.1 8.5 8.3 8.5 8.4	APRIL 9.6 9.6 9.4 9.0 9.1 8.5 8.4 7.7 7.7 7.3 7.4 7.9 7.8	10.6 10.4 11.1 10.6 10.6 9.6 9.7 9.7 9.9 8.6 7.7 8.0 8.1 8.2 8.1	15.6 14.9 12.5 12.4 10.9 9.2 7.7 8.4 9.2 9.9 11.5 13.1 14.7 16.7 19.1	MAY 6.9 7.0 7.4 7.5 7.3 7.3 7.7 7.5 7.8 8.1 8.2 7.9 8.0 7.7	10.4 9.7 9.4 8.8 8.1 7.5 8.3 8.5 9.3 10.2 11.0 11.7 12.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	MAX 13.7 14.3 14.0 14.3 14.1 11.1 12.8 13.5 13.0 12.5 13.4 14.0 14.4 14.6	MIN FEBRUARY 11.8 12.5 12.5 12.2 11.9 11.1 11.0 9.7 10.5 12.8 12.6 12.1 12.0 12.5 13.4 13.9 14.4 14.1	MEAN 12.6 13.2 13.1 13.0 12.8 12.3 11.9 13.1 12.6 12.1 12.9 13.8 14.2 14.5 14.4	12.1 11.5 11.6 11.5 11.3 11.3 11.3 10.4	MARCH 12.1 11.2 11.3 11.3 10.9 10.6 10.8 10.4 9.7 10.0 9.9 9.7	12.1 11.4 11.5 11.4 11.3 11.0 11.0 10.9 10.0 10.3 10.1 9.8	11.9 11.4 13.4 12.6 12.5 10.9 11.9 11.7 12.5 9.6 8.1 8.5 8.3 8.5 8.4	APRIL 9.6 9.6 9.0 9.1 8.5 8.4 8.2 7.7 7.7 7.3 7.4 7.9 7.9 7.8 8.6 9.0	10.6 10.4 11.1 10.6 10.6 9.6 9.9 9.7 9.9 8.6 7.7 8.0 8.1 8.2 8.1	15.6 14.9 12.5 12.4 10.9 9.2 7.7 8.4 9.2 9.9 11.5 13.1 14.7 16.7 19.1	MAY 6.9 7.0 7.4 7.5 7.3 7.3 7.7 7.5 7.8 8.1 8.2 7.9 8.0 7.7 7.5	10.4 9.7 9.4 8.8 8.1 7.5 7.9 8.3 8.5 9.3 10.2 11.0 11.7 12.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	MAX 13.7 14.3 14.0 14.3 14.1 11.1 12.8 13.5 13.0 12.5 13.4 14.0 14.4	MIN FEBRUARY 11.8 12.5 12.5 12.2 11.9 11.1 11.0 9.7 10.5 12.8 12.6 12.1 12.0 12.5 13.4 13.9 14.4	MEAN 12.6 13.2 13.1 13.0 12.8 12.3 12.2 10.3 11.9 13.0 13.1 12.6 12.1 12.9 13.8 14.2 14.5	12.1 11.5 11.6 11.5 11.3 11.3 10.4	MARCH 12.1 11.2 11.3 11.3 10.9 10.6 10.8 10.4 9.7 10.0 9.9	12.1 11.4 11.5 11.4 11.3 11.0 11.0 10.9 10.0	11.9 11.4 13.4 12.6 12.5 10.9 11.9 11.7 12.5 9.6 8.1 8.5 8.3 8.5 8.4	APRIL 9.6 9.4 9.0 9.1 8.5 8.4 8.2 7.7 7.7 7.3 7.4 7.9 7.8 7.8 8.6	10.6 10.4 11.1 10.6 10.6 9.6 9.7 9.9 8.6 7.7 8.0 8.1 8.2 8.1	15.6 14.9 12.5 12.4 10.9 9.2 7.7 8.4 9.2 9.9 11.5 13.1 14.7 16.7 19.1	MAY 6.9 7.0 7.4 7.5 7.3 7.3 7.3 7.7 7.5 7.8 8.1 8.2 7.9 8.0 7.7 7.5	10.4 9.7 9.4 8.8 8.1 7.5 7.9 8.3 8.5 9.3 10.2 11.7 12.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	MAX 13.7 14.3 14.0 14.3 14.1 11.1 12.8 13.2 13.5 13.0 14.1 14.4 14.6 14.6 14.6 14.1 13.5	MIN FEBRUARY 11.8 12.5 12.5 12.2 11.9 11.1 11.0 9.7 10.5 12.8 12.6 12.1 12.0 12.5 13.4 13.9 14.4 14.1 13.2 13.0 13.1	MEAN 12.6 13.2 13.1 13.0 12.8 12.3 11.9 13.0 13.1 12.6 12.1 12.9 13.8 14.2 14.5 14.4 13.9 13.2	12.1 11.5 11.6 11.5 11.3 11.3 11.3 10.4 10.6 10.3 10.0 10.1	MARCH 12.1 11.2 11.3 11.3 10.9 10.6 10.8 10.4 9.7 10.0 9.9 9.7 9.6 9.7	12.1 11.4 11.5 11.4 11.3 11.0 11.0 10.9 10.0 10.3 10.1 9.8 9.9 10.0	11.9 11.4 13.4 12.6 12.5 10.9 11.9 11.7 12.5 9.6 8.1 8.5 8.3 8.5 8.4 8.6 9.4 9.7 10.4 10.9	APRIL 9.6 9.6 9.4 9.0 9.1 8.5 8.4 7.7 7.7 7.3 7.4 7.9 7.8 8.6 9.0 8.9 8.5	10.6 10.4 11.1 10.6 10.6 9.9 9.7 9.9 8.6 7.7 8.0 8.1 8.2 8.1 8.3 9.0 9.5 9.5	15.6 14.9 12.5 12.4 10.9 9.2 7.7 8.4 9.2 9.9 11.5 13.1 14.7 16.7 19.1	MAY 6.9 7.0 7.4 7.5 7.3 7.3 7.7 7.5 7.8 8.1 8.2 7.9 8.0 7.7 7.5	10.4 9.7 9.4 8.8 8.1 7.5 8.3 8.5 9.3 10.2 11.0 11.7 12.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	MAX 13.7 14.3 14.0 14.3 14.1 11.1 12.8 13.5 13.4 14.0 14.6 14.6 14.1 13.5 14.1 14.5	MIN FEBRUARY 11.8 12.5 12.5 12.2 11.9 11.1 11.0 9.7 10.5 12.8 12.6 12.1 12.0 12.5 13.4 13.9 14.1 13.2 13.0 13.1 13.9 14.0	MEAN 12.6 13.2 13.1 13.0 12.8 12.3 11.9 13.1 12.6 12.1 12.9 13.8 14.2 14.5 14.4 13.9 13.2 13.5 14.3 14.6	12.1 11.5 11.6 11.5 11.5 11.3 11.3 11.3 10.4 10.6 10.3 10.0 10.1 10.1	MARCH 12.1 11.2 11.3 11.3 10.9 10.6 10.8 10.4 9.7 10.0 9.9 9.7 9.6 9.7 9.6 9.7	12.1 11.4 11.5 11.4 11.3 11.0 10.0 10.0 10.3 10.1 9.8 9.9 10.0 9.6 9.3 9.1	11.9 11.4 13.4 12.6 12.5 10.9 11.9 11.7 12.5 9.6 8.1 8.5 8.3 8.5 8.4 9.4 9.7 10.4 10.9 14.0	APRIL 9.6 9.6 9.4 9.0 9.1 8.5 8.4 8.2 7.7 7.7 7.3 7.4 7.9 7.8 7.8 8.6 9.0 8.9 7.8 7.8 8.6 8.6	10.6 10.4 11.1 10.6 10.6 9.6 9.9 9.7 9.9 8.6 7.7 8.0 8.1 8.2 8.1 8.3 9.5 9.5 9.5	15.6 14.9 12.5 12.4 10.9 9.2 7.7 8.4 9.2 9.9 11.5 13.1 14.7 16.7 19.1 19.5 16.1 	MAY 6.9 7.0 7.4 7.5 7.3 7.3 7.7 7.5 7.8 8.1 8.2 7.9 8.0 7.7 7.5 7.2 7.5	10.4 9.7 9.4 8.8 8.1 7.5 7.9 8.3 8.5 9.3 10.2 11.0 11.7 12.9 13.4 10.6 7.4 7.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	MAX 13.7 14.3 14.0 14.3 14.1 11.1 12.8 13.5 13.0 12.5 13.4 14.6 14.6 14.6 14.1 13.5	MIN FEBRUARY 11.8 12.5 12.5 12.2 11.9 11.1 11.0 9.7 10.5 12.8 12.6 12.1 12.0 12.5 13.4 13.9 14.4 14.1 13.2 13.0 13.1 13.9	MEAN 12.6 13.2 13.1 13.0 12.8 12.2 10.3 11.9 13.0 13.1 12.6 12.1 12.9 13.8 14.2 14.5 14.4 13.9 13.2	12.1 11.5 11.6 11.5 11.3 11.3 10.4 10.6 10.3 10.0 10.1 10.1	MARCH 12.1 11.2 11.3 11.3 10.9 10.6 10.8 10.4 9.7 10.0 9.9 9.7 9.7 9.6 9.7 9.6 9.7	12.1 11.4 11.5 11.4 11.3 11.0 11.0 9.0 10.1 9.8 9.9 10.0 9.6 9.3	11.9 11.4 13.4 12.6 12.5 10.9 11.9 11.7 12.5 9.6 8.1 8.5 8.3 8.5 8.4 8.6 9.4 9.7 10.9	APRIL 9.6 9.4 9.0 9.1 8.5 8.4 8.2 7.7 7.7 7.3 7.4 7.9 7.8 8.6 9.0 8.5 7.8 7.8 8.7 8.6 9.0 8.5	10.6 10.4 11.1 10.6 10.6 9.6 9.9 9.7 9.9 8.6 7.7 8.0 8.1 8.3 9.3 9.3 9.5 9.5	15.6 14.9 12.5 12.4 10.9 9.2 7.7 8.4 9.2 9.9 11.5 13.1 14.7 16.7 19.1	MAY 6.9 7.0 7.4 7.5 7.3 7.3 7.7 7.5 7.8 8.1 8.2 7.9 8.0 7.7 7.5 7.2	10.4 9.7 9.4 8.8 8.1 7.5 7.9 8.3 8.5 9.3 10.2 11.0 11.7 12.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	MAX 13.7 14.3 14.0 14.3 14.1 11.1 12.8 13.2 13.5 13.0 12.5 13.4 14.0 14.4 14.6 14.1 13.5 14.1 14.5 14.1 11.5	MIN FEBRUARY 11.8 12.5 12.5 12.2 11.9 11.1 11.0 9.7 10.5 12.8 12.6 12.1 12.0 12.5 13.4 13.9 14.4 14.1 13.2 13.0 13.1 13.9 14.0 11.1	MEAN 12.6 13.2 13.1 13.0 12.8 12.3 11.9 13.1 13.0 13.1 14.6 12.1 12.9 13.8 14.2 14.5 14.4 13.9 13.2 13.5 14.6 10.9	12.1 11.5 11.6 11.5 11.3 11.3 11.3 10.4 10.6 10.3 10.0 10.1 10.1 9.7 9.4 9.3 9.5 9.8 10.3	MARCH 12.1 11.2 11.3 11.3 10.9 10.6 10.8 10.4 9.7 10.0 9.9 9.7 9.6 9.7 9.6 9.7 9.1 8.8 8.8 9.2	12.1 11.4 11.5 11.4 11.3 11.0 11.0 10.9 10.0 10.3 10.1 9.8 9.9 10.0 9.6 9.3 9.1 9.2 9.5	11.9 11.4 13.4 12.6 12.5 10.9 11.9 11.7 12.5 9.6 8.1 8.5 8.3 8.5 8.4 8.6 9.7 10.4 10.9 12.4 10.9 14.0 15.2 16.5	APRIL 9.6 9.6 9.4 9.0 9.1 8.5 8.4 7.7 7.7 7.3 7.4 7.9 7.8 8.6 9.0 8.9 8.5 7.9 7.8 8.6 9.0 9.0 8.6	10.6 10.4 11.1 10.6 10.6 9.6 9.7 9.9 8.6 7.7 8.0 8.1 8.2 8.1 8.3 9.0 9.3 9.5 9.5 9.1 11.0 11.8 12.3	15.6 14.9 12.5 12.4 10.9 9.2 7.7 8.4 9.2 9.9 11.5 13.1 14.7 16.7 19.1 19.5 16.1 	MAY 6.9 7.0 7.4 7.5 7.3 7.3 7.7 7.5 7.8 8.1 8.2 7.9 8.0 7.7 7.5 7.2 7.5 7.4 8.2 7.9	10.4 9.7 9.4 8.8 8.1 7.5 9.3 10.2 11.0 11.7 12.9 13.4 10.6 7.4 7.8 8.2 9.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	MAX 13.7 14.3 14.0 14.3 14.1 11.1 12.8 13.5 13.0 12.5 13.4 14.0 14.4 14.6 14.1 13.5 14.1 14.5 14.9 14.8 11.5 11.0 12.1	MIN FEBRUARY 11.8 12.5 12.5 12.2 11.9 11.1 11.0 9.7 10.5 12.8 12.6 12.1 12.0 12.5 13.4 13.9 14.4 14.1 13.2 13.0 13.1 13.9 14.0 11.1 10.4 10.4 10.6 11.0	MEAN 12.6 13.2 13.1 13.0 12.8 12.2 10.3 11.9 13.0 13.1 12.6 12.1 12.9 13.8 14.2 14.5 14.4 13.9 13.2 14.5 14.6 10.9 10.7 11.6	12.1 11.5 11.6 11.5 11.3 11.3 11.3 10.4 10.6 10.1 9.7 9.4 9.3 9.5 9.8 10.3 10.4 10.6	MARCH 12.1 11.2 11.3 11.3 10.9 10.6 10.8 10.4 9.7 10.0 9.9 9.7 9.6 9.7 9.6 9.7 9.6 9.7 9.6 9.7 9.6 9.7	12.1 11.4 11.5 11.4 11.3 11.0 11.0 10.9 10.0 10.3 10.1 9.8 9.9 10.0 9.6 9.3 9.1 9.2 9.5 9.9	11.9 11.4 13.4 12.6 12.5 10.9 11.9 11.7 12.5 9.6 8.1 8.5 8.3 8.5 8.4 8.6 9.4 9.7 10.4 10.9 14.0 15.2 16.5	APRIL 9.6 9.4 9.0 9.1 8.5 8.4 8.2 7.7 7.7 7.3 7.4 7.9 7.8 8.6 9.0 8.7 8.6 9.0 8.6 9.0 8.6 8.3 8.2	10.6 10.4 11.1 10.6 10.6 9.6 9.9 9.7 9.9 8.6 7.7 8.0 8.1 8.2 8.1 8.3 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5	15.6 14.9 12.5 12.4 10.9 9.2 7.7 8.4 9.2 9.9 11.5 13.1 14.7 19.1 19.5 16.1 9.2 8.2 8.2 8.9 11.0	MAY 6.9 7.0 7.4 7.5 7.3 7.3 7.7 7.5 7.8 8.1 8.2 7.9 8.0 7.7 7.5 7.4 8.2 7.9 8.2 7.9 6.9	10.4 9.7 9.4 8.8 8.1 7.5 7.9 8.3 8.5 9.3 10.2 11.7 12.9 13.4 10.6 7.4 7.8 8.2 9.4 9.4 9.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	MAX 13.7 14.3 14.0 14.1 11.1 12.8 13.2 13.5 13.0 12.5 13.4 14.0 14.4 14.6 14.6 14.6 14.1 13.5 14.1 11.5 14.5 14.9 11.5 11.0 12.1	MIN FEBRUARY 11.8 12.5 12.5 12.2 11.9 11.1 11.0 9.7 10.5 12.8 12.6 12.1 12.0 12.5 13.4 13.9 14.4 14.1 13.2 13.0 13.1 13.9 14.0 11.1 10.4 10.6 11.0	MEAN 12.6 13.2 13.1 13.0 12.8 12.2 10.3 11.9 13.0 13.1 12.6 12.1 12.9 13.8 14.2 14.5 14.4 13.9 13.2 14.6 10.9 10.7 11.6	12.1 11.5 11.6 11.5 11.3 11.3 10.4 10.6 10.3 10.0 10.1 10.1 9.7 9.4 9.3 9.5 9.8 10.3 10.4 10.6 10.9	MARCH 12.1 11.2 11.3 11.3 10.9 10.6 10.8 10.4 9.7 10.0 9.9 9.7 9.6 9.7 9.6 9.7 9.6 9.7 9.6 9.7 9.6 9.7	12.1 11.4 11.5 11.4 11.3 11.0 11.0 10.9 10.0 10.3 10.1 9.8 9.9 10.0 9.6 9.3 9.1 9.2 9.5	11.9 11.4 13.4 12.6 12.5 10.9 11.7 12.5 9.6 8.1 8.5 8.3 8.5 8.4 8.6 9.4 9.7 10.4 10.9 14.0 15.2 16.5 17.8 17.6 17.8	APRIL 9.6 9.4 9.0 9.1 8.5 8.4 7.7 7.7 7.3 7.4 7.9 7.8 8.6 9.0 8.5 7.8 8.6 9.0 8.6 8.3 8.2 8.3	10.6 10.4 11.1 10.6 10.6 9.6 9.9 9.7 9.9 8.6 7.7 8.0 8.1 8.3 9.0 9.3 9.5 9.5 9.5 9.1 11.0 11.8 12.3	15.6 14.9 12.5 12.4 10.9 9.2 7.7 8.4 9.2 9.9 11.5 13.1 14.7 16.7 19.1 19.5 16.1 9.2 8.2 8.2 8.2 8.9 11.0	MAY 6.9 7.0 7.4 7.5 7.3 7.3 7.7 7.5 7.8 8.1 8.2 7.9 8.0 7.7 7.5 7.2 7.5 7.4 8.2 7.9 8.2 7.9 8.2 7.7 7.5 7.4 8.2 7.9 7.2 7.5 7.4 8.2	10.4 9.7 9.4 8.8 8.1 7.5 9.3 10.2 11.0 11.7 12.9 13.4 10.6 7.4 7.8 8.2 9.4 9.3 8.8 10.2 8.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	MAX 13.7 14.3 14.0 14.3 14.1 11.1 12.8 13.2 13.5 13.0 12.5 13.4 14.0 14.4 14.6 14.1 13.5 14.1 14.5 14.1 13.5	MIN FEBRUARY 11.8 12.5 12.5 12.2 11.9 11.1 11.0 9.7 10.5 12.8 12.6 12.1 12.0 12.5 13.4 13.9 14.4 14.1 13.2 13.0 13.1 13.9 14.0 11.1 10.4 10.6 11.0	MEAN 12.6 13.2 13.1 13.0 12.8 12.3 11.9 13.0 13.1 12.6 12.1 12.9 13.8 14.2 14.5 14.4 13.9 13.2 14.5 14.3 14.6 10.9 10.7 11.6	12.1 11.5 11.6 11.5 11.3 11.3 11.3 10.4 10.6 10.3 10.0 10.1 10.1 9.7 9.4 9.3 9.5 9.8 10.3 10.4	MARCH 12.1 11.2 11.3 11.3 10.9 10.6 10.8 10.4 9.7 10.0 9.9 9.7 9.6 9.7 9.1 8.8 8.8 9.2 9.6 9.7 9.1 0.0	12.1 11.4 11.5 11.4 11.3 11.0 11.0 10.9 10.0 10.3 10.1 9.9 10.0 9.6 9.3 9.9 10.0 9.5 9.5 9.9	11.9 11.4 13.4 12.6 12.5 10.9 11.9 11.7 12.5 9.6 8.1 8.5 8.4 8.6 9.4 9.7 10.4 10.9 12.4 10.9 12.4 10.9 14.0 15.2 16.5	APRIL 9.6 9.6 9.0 9.1 8.5 8.4 7.7 7.7 7.3 7.4 9.9 7.8 8.6 9.0 9.0 8.6 8.3 8.2 8.2	10.6 10.4 11.1 10.6 10.6 9.6 9.7 9.9 8.6 7.7 8.0 8.1 8.2 8.1 8.3 9.3 9.5 9.5 9.5 9.1 11.8 12.3 12.5 12.6 12.6	15.6 14.9 12.5 12.4 10.9 9.2 7.7 8.4 9.2 9.9 11.5 13.1 14.7 16.7 19.1 19.5 16.1 9.2 8.2 8.2 8.9 11.0	MAY 6.9 7.0 7.4 7.5 7.3 7.3 7.7 7.5 7.8 8.1 8.2 7.9 8.0 7.7 7.5 7.4 8.2 7.9 8.2 7.9 6.8	10.4 9.7 9.4 8.8 8.1 7.5 8.3 8.5 9.3 10.2 11.0 11.7 12.9 13.4 10.6 7.4 8.2 9.4 9.3 8.8

387

07144100 LITTLE ARKANSAS RIVER NEAR SEDGWICK, KS--Continued OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY		P	AUGUST		S	SEPTEMBE	R
1 2 3 4 5	8.5 7.9 7.8 7.7 8.1	7.6 7.4 7.2 7.3 7.3	8.0 7.7 7.5 7.5 7.7	12.8 14.6 15.5 18.0	7.5 7.3 7.4 8.2 7.8	9.6 10.3 10.6 12.3	15.9 17.4 16.9 17.4	6.1 7.1 7.5 8.2	10.4 11.7 11.8 12.2	14.6 15.4 16.2 16.1 16.0	5.3 7.2 6.8 8.1 8.8	9.7 11.3 11.6 12.1 11.9
6 7 8 9 10	7.3 6.2 7.4 6.5 5.8	6.2 6.1 6.1 5.8 5.4	6.5 6.1 6.7 6.1 5.6	 16.9 17.0	8.6 5.8	 10.6	16.1 16.5 15.8 13.9 15.4	8.2 8.5 7.7 7.4	11.9 11.7 11.0 11.5	16.3 13.4 	8.6 9.5 	12.4 11.1
11 12 13 14 15	5.6 6.0 6.3 6.8 7.2	5.2 5.4 5.9 6.2 6.7	5.5 5.7 6.2 6.6 7.0	15.7 13.9 12.4 13.9	5.7 5.7 6.0 6.6 6.6	10.2 9.3 9.1 9.9 9.5	15.3 18.8 16.5 16.9 18.4	9.4 9.6 8.8 8.9 8.6	12.4 13.2 12.5 12.8 12.7	13.6 15.4 16.0 16.1 14.1	8.5 8.6 8.7 7.9	12.0 12.3 12.6 11.3
16 17 18 19 20	7.5 7.7 7.8 8.3 7.7	6.8 6.9 7.1 7.1 7.0	7.2 7.3 7.4 7.6 7.4	15.0 13.6 13.8 12.9 14.8	6.8 5.8 5.7 5.6 6.1	10.1 9.0 9.2 8.9 10.0	19.3 13.8 16.3 15.3	8.5 7.4 5.4 6.9 8.0	13.2 10.6 10.4 10.9 12.4	13.4 14.7 10.9 5.7 5.7	8.4 8.4 5.6 5.5 5.4	11.1 11.3 6.9 5.6 5.5
21 22 23 24 25	7.3 5.6 5.6 6.3 6.9	5.4 5.0 5.1 5.2 6.3	6.4 5.3 5.3 5.7 6.8	13.7 15.2 16.7 17.1 19.5	6.0 5.8 5.9 6.5 6.9	9.7 10.2 10.6 11.3 12.2	15.6 16.4 17.7 15.7 16.6	8.1 8.7 7.9 7.4	11.8 12.4 11.9 11.6	6.7 6.9 7.2 	5.5 6.6 6.6 7.2	6.2 6.8 6.9
26 27 28 29 30 31	7.2 7.6 7.8 8.3 9.3	6.8 7.1 7.1 7.2 7.5	7.1 7.3 7.4 7.6 8.3	14.5 13.9 9.6 11.9 13.5 13.6	6.4 6.4 5.4 6.3 5.4 5.6	10.3 9.8 7.2 8.5 8.9 9.3	16.3 16.1 14.7 15.1	8.2 9.2 7.2 6.4	12.2 11.0 10.6	7.9 7.7 7.8 8.0	7.7 7.5 7.4 7.4 7.5	7.7 7.6 7.6 7.7
MONTH	9.3	5.0	6.8	19.5	5.4	9.9	19.3	5.4	11.8	16.3	5.3	9.5
YEAR	19.7	5.0	10.9									

YEAR	19.7	5.0	10.9									
TURBIDI'	TY, FIELD,	WATER,	UNFILTE	RED, NEP	HELOMETRI	C TURBIDITY	UNITS,	WATER	YEAR OCTOBER	2000	TO SEPTEMB	ER 20
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	0	CTOBER		1	NOVEMBER		D	ECEMBER	₹		JANUARY	
1	29	23	26	330	240	270	8.2	6.8	7.4	5.4	4.2	4.7
2	32	23	27	330	230	270	7.5	5.7	6.5	6.4		4.9
3	32	22	26	510	250	390	8.4	6.0	6.8	6.9		5.0
	29	22						5.6				
4			25	460	290	330	13		8.5	7.5		4.7
5	29	22	24	290	210	250	10	5.0	7.6	7.5	4.1	4.7
6	25	14	19	210	150	180	9.2	4.7	6.6	5.2	4.1	4.5
7	70	11	19	150	110	130	10	5.0	7.1	5.7	4.1	4.8
8	26	13	17	120	92	110	10	5.7	7.3	5.4	4.3	4.8
9	26	13	16	110	73	87	10	5.8	6.9	6.1	4.5	5.0
10	23	16	18	74	61	67	7.4	4.3	5.5	7.0	4.7	5.4
11	43	17	21	62	47	53	9.3	4.3	6.7	7.0	5.1	5.8
12		22			37	42		6.9	8.4			6.0
	43		26	48			12			8.2		
13	36	21	24	37	29	33	10	5.7	7.1	9.8		6.8
14	46	30	36	40	23		8.0	4.7	6.1	9.8		7.8
15	48	27	33	32	21	25	8.0	4.6	5.8	9.3	6.0	6.9
16	45	27	33	23	14	19	5.5	4.1	4.7	8.7	5.2	6.2
17	42	21	28	17	11	14	5.8	4.3	5.0	6.4	4.8	5.3
18	33	21	26	30	8.9	14	5.1	4.0	4.5	5.3		4.6
19	32	27	29	13	7.0	9.6	5.7	3.3	4.1	7.5	4.2	5.2
20	42	29	34	9.7	6.8	8.2	5.1	3.6	4.2	8.2		5.4
20	12	2,5	31	J. 1	0.0	0.2	3.1	3.0	1.2	0.2	1.5	5.1
21	43	29	37	13	6.4	8.3	4.8	3.2	3.6	5.8	4.2	4.8
22	53	36	42	9.5	5.4	7.1	4.8	3.4	3.9	7.5	4.1	5.3
23	61	34	46	9.5	5.3	7.2	5.3	3.6	3.9	12	5.6	8.2
24	76	44	51	16	9.5	11	4.5	3.6	4.1	14	6.1	8.8
25	>1900	48		13	8.5	10	4.8	3.9	4.2	17	6.4	9.2
25	>1900	48		13	8.5	10	4.8	3.9	4.2	1/	0.4	9.2
26		450		11	6.5	8.3	5.9	4.2	4.5	13	6.8	8.9
27	650	500	570	18	6.6	11	4.8	4.1	4.4	12	7.0	8.4
28	540	370	460	16	9.4	12	8.6	3.8	5.1	14	6.4	7.8
29	480	310	380	15	9.5	12	5.5	4.4	4.7	19	9.5	15
30	380	260	300	11	7.4	8.3	5.6	4.2	4.7	25	18	20
					7.4	8.3						
31	340	260	300				5.3	4.3	4.6	29	21	24
MONTH	1900	11	93	510	5.3	81	13	3.2	5.6	29	3.9	7.4

07144100 LITTLE ARKANSAS RIVER NEAR SEDGWICK, KS--Continued

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 20

									TEAR OCTOB			
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUAR'S			MARCH			APRIL			MAY	
1 2	30 21	21 16	25 18	1200	760 	1000 e700	46 39 37 40 42	38 30	43 36	25 30		22 25
3 4	19 20	12 11	15 14			e500 e300	37 40	30 31	35 35	35 53	35	29 40
5	21	12	16	230	150	190	42	33	38	75	53	61
6 7	22 24	13 10	17 17 51 390	180 120	120 85 64 60 63	150 110	46 55	37 41	41 49	260 310	66 230	120 280
8 9	130 1100	23 110	51 390	85 69	64 60	73 64 71	56 56	46	51 49	230 170	100	200 150
10	160	72	100	78	63	71	140		58	150	110 91	120
11 12	81 52	42 35	58 43	70 >1500	59 52	65 >340	650 960	140 360	370 580	140 120	94 60	110 97
13	320	48	110	>1500	>1500	>1500	970	370	700	110	48	81
14 15	550 390	320 220	450 270	>1500 >1500	>1500 >1500	>1500 >1500	370 260	180 210	240 230	95 69	36 35	70 55
16	230	190	210	>1500	>1500	>1500	410	210 240 190 130 94 74	330	66	37	55
17 18	190 170	140 140	160 150	>1500 >1500	>1500 >1500	>1500 >1500	360 190	190 130	290 150	88 95	48 72	73 83
19 20	150 140	120 96	130 120	>1500 1300	1100 860	>1400 1100	130 94	94 74	330 290 150 110 85	82 87	60 61	74 79
21	120	96 93 98 200 1300	100	920	550	710	79	67	74			140
22	220 1500	98 200	100 140 500	550 320	320 190	710 420 250	79 76 64	57 59	74 66 62	930 430	82 110 220	450 300
24 25	>1800 >1800		>1500 >1800	190 130	550 320 190 130 89	160 110	64 47	44 35	56 42	220 150	150 96	180 120
26				130	63					120	99	110
27	>1800 >1800	1200	>1800 >1600	89 66	49	74 56	44 32 28 25 25	23	36 28 25 24	140	100	120
28 29	1600	960 	1300	49 44	41 39	56 45 41 44	28 25	24 22	25 24	120 190	53 62	99 96
30 31				51 52	42 44	44 46	25 	21	22	260 530	160 260	210 320
MONTH	1800	10	400	1500	39	550	970	21	130	930	19	130
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN		MIN AUGUST	MEAN	MAX	MIN SEPTEMB	
1	690	JUNE 350	510	80	JULY		70	AUGUST	64		SEPTEMB.	ER 49
		JUNE			JULY		70	AUGUST			SEPTEMB.	ER 49 48 43
1 2 3 4	690 1000	JUNE 350 370 800 590	510 520 1100 740	80 67 57 46	JULY 43 39 27	69 54 43 36	70	AUGUST	64 57 55 58		SEPTEMB.	ER 49 48
1 2 3 4 5	690 1000 1400 900 >2000	JUNE 350 370 800 590 550	510 520 1100 740 >840	80 67 57 46 43	JULY 43 39 27 24 27	69 54 43 36 36	79 73 73 76 74	AUGUST 42 38 37 41 39	64 57 55 58 58	56 68 60 60	\$EPTEMB: 40 33 31 34 38	49 48 43 45 48
1 2 3 4 5	690 1000 1400 900 >2000 >2000	JUNE 350 370 800 590 550 520 380	510 520 1100 740 >840 >960 440	80 67 57 46 43 49	JULY 43 39 27 24 27	69 54 43 36 36	79 73 73 76 74 67 69	AUGUST 42 38 37 41 39 39	64 57 55 58 58 54 54	56 68 60 60	\$EPTEMB: 40 33 31 34 38	49 48 43 45 48
1 2 3 4 5 6 7 8 9	690 1000 1400 900 >2000 >2000 520 1300 880	JUNE 350 370 800 590 550 520 380 350 550	510 520 1100 740 >840 >960 440 700 640	80 67 57 46 43 49 64 55	JULY 43 39 27 24 27 30 33 32 30	69 54 43 36 36 36	79 73 73 76 74 67 69 68	42 38 37 41 39 39 40	64 57 55 58 58 54 54 54 e50	56 68 60 60	\$EPTEMB: 40 33 31 34 38	49 48 43 45 48 46 48 29 36
1 2 3 4 5 6 7 8 9	690 1000 1400 900 >2000 >2000 520 1300 880 670	JUNE 350 370 800 590 550 520 380 350 550	510 520 1100 740 >840 >960 440 700 640 610	80 67 57 46 43 49 64 55 55	JULY 43 39 27 24 27 30 33 32 30 30	69 54 43 36 36 39 46 45 43	79 73 73 76 74 67 69 68 	42 38 37 41 39 39 40 	64 57 55 58 58 54 54 54 e50 e46	56 68 60 60 69 58 72 39 48 46	\$\frac{40}{33}\$ \$\frac{33}{34}\$ \$\frac{34}{38}\$ \$\frac{38}{32}\$ \$\frac{11}{29}\$ \$\frac{29}{29}\$	49 48 43 45 48 46 48 29 36
1 2 3 4 5 6 7 8 9 10	690 1000 1400 900 >2000 >2000 520 1300 880 670 550 410	JUNE 350 370 800 590 550 520 380 350 550 550 410 370	510 520 1100 740 >840 >960 440 700 640 610	80 67 57 46 43 49 64 55 55 52	JULY 43 39 27 24 27 30 33 32 30 30 30 33 36	69 54 43 36 36 36 39 46 45 43 42	79 73 73 76 74 67 69 68 47	42 38 37 41 39 39 39 40 27	64 57 55 58 58 54 54 54 650 e46	56 68 60 60 69 58 72 39 48 46	\$EPTEMB: 40 33 31 34 38 32 11 29 29 28 25	49 48 43 45 48 46 48 29 36 36 36 37 34
1 2 3 4 5 6 7 8 9 10 11 12 13 14	690 1000 1400 900 >2000 >2000 520 1300 880 670 550 410 390 310	JUNE 350 370 800 590 550 520 380 350 550 410 370 310 230	510 520 1100 740 >840 >960 440 700 640 610 480 380 350 280	80 67 57 46 43 49 64 55 55 52 51 56 63 64	JULY 43 39 27 24 27 30 33 32 20 30 30 30 33 36 39 38	69 54 43 36 36 39 46 45 43 42 43 47 52 52	79 73 73 76 74 67 69 68 47 42 51	AUGUST 42 38 37 41 39 39 40 27 25 33	64 57 55 58 58 54 54 650 646 642 38 35 42	56 68 60 60 69 58 72 39 48 46 47 46 46 46	\$EPTEMB: 40 33 31 34 38 38 32 11 11 29 29 29 28 25 25 24	49 48 43 45 48 46 48 29 36 36 37 34 33 34
1 2 3 4 5 6 7 8 9 10	690 1000 1400 900 >2000 520 1300 880 670 550 410 390	JUNE 350 370 800 590 550 520 380 350 550 550 410 370 310	510 520 1100 740 >840 >960 440 700 640 610 380 350	80 67 57 46 43 49 64 55 55 52 51 56 63	JULY 43 39 27 24 27 30 33 32 30 30 30 33 36 39	69 54 43 36 36 36 39 46 45 43 42 43 47 52	79 73 73 76 74 67 69 68 47 42	AUGUST 42 38 37 41 39 39 40 27 25	64 57 55 58 58 54 54 54 e50 e46	56 68 60 69 58 72 39 48 46 47 46	\$\frac{40}{33}\$ \tag{31}{34}\$ \tag{38}\$ \tag{38}\$ \tag{32}\$ \tag{11}\$ \tag{29}\$ \tag{28}\$ \tag{25}\$ \tag{25}\$	49 48 43 45 48 46 48 29 36 36 36
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	690 1000 1400 900 >2000 520 1300 880 670 550 410 390 310 230	JUNE 350 370 800 590 550 520 380 350 550 550 410 370 310 230 190	510 520 1100 740 >840 >960 440 700 640 610 480 380 210	80 67 57 46 43 49 64 55 55 52 51 56 63 64 59	JULY 43 39 27 24 27 30 33 32 22 30 30 30 37 38	69 54 43 36 36 39 46 45 43 42 43 47 52 52 49	79 73 73 76 74 67 69 68 47 42 51 52	42 38 37 41 39 39 39 40 27 25 33 31	64 57 55 58 58 54 54 650 e46 e42 38 35 42 41	56 68 60 60 69 58 72 39 48 46 46 46 46 45	\$\frac{40}{33}\$ \\ \frac{31}{34}\$ \\ \frac{38}{38}\$ \\ \frac{38}{32}\$ \\ \frac{11}{11}\$ \\ \frac{29}{29}\$ \\ \frac{28}{25}\$ \\ \frac{25}{24}\$ \\ \frac{29}{29}\$ \\ \frac{25}{25}\$	49 48 43 45 48 46 48 29 36 36 36 37 34 33 34 36
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	690 1000 1400 900 >2000 520 1300 670 550 410 390 310 230 140 160	JUNE 350 370 800 590 550 520 380 350 550 410 370 310 230 190 140 110	510 520 1100 740 >840 >960 440 700 640 610 480 350 280 210 170 130 140	80 67 57 46 43 49 64 55 55 52 51 56 63 64 59	JULY 43 39 27 24 27 30 33 32 30 30 30 33 36 39 38 37 38 40 40	69 54 43 36 36 36 39 46 45 43 42 43 47 52 52 49 49 58 57	79 73 73 76 74 67 69 68 47 42 51 52 48 93 52	AUGUST 42 38 37 41 39 39 40 27 25 33 31 29 29 31	64 57 55 58 58 54 54 54 650 e46 e42 38 35 42 41 37 53 39	56 68 60 60 69 58 72 39 48 46 46 46 45 46 45 40 >1500	SEPTEMB: 40 33 31 34 38 38 32 11 29 29 28 25 25 24 29 25 27 49	49 48 43 45 48 46 48 29 36 36 36 37 34 33 34 36
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	690 1000 1400 900 >2000 520 1300 670 550 410 390 310 230 230	JUNE 350 370 800 590 550 520 380 350 550 550 410 370 310 230 190 140 110	510 520 1100 740 >840 >960 440 700 640 610 480 380 350 280 210	80 67 57 46 43 49 64 55 55 52 51 56 63 64 59	JULY 43 39 27 24 27 30 33 32 30 30 30 33 36 39 38 37	69 54 43 36 36 39 46 45 42 43 47 52 49	79 73 73 76 74 67 69 68 47 42 51 52 48 93	42 38 37 41 39 39 39 40 27 25 33 31 29	64 57 55 58 58 54 54 e50 e46 e42 38 35 42 41	56 68 60 60 69 58 72 39 48 46 46 46 45 46 140	\$\frac{40}{33}\$ \\ \frac{31}{34}\$ \\ \frac{38}{38}\$ \\ \frac{38}{32}\$ \\ \frac{11}{11}\$ \\ \frac{29}{29}\$ \\ \frac{28}{25}\$ \\ \frac{25}{24}\$ \\ \frac{29}{29}\$ \\ \frac{25}{27}\$	49 48 43 45 48 46 48 29 36 36 37 34 33 34 36
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	690 1000 1400 900 >2000 520 1300 880 670 550 410 390 310 230 230 140 150 230	JUNE 350 370 800 590 550 520 380 350 550 550 410 370 310 230 190 140 110 110 110 110 110 170	510 520 1100 740 >840 >960 440 610 480 380 210 170 130 140 210	80 67 57 46 43 49 64 55 55 52 51 56 63 64 59 57 73 70 67 68	JULY 43 39 27 724 27 30 33 32 22 30 30 30 37 38 40 40 41 38	69 54 43 36 36 39 46 45 43 42 43 47 52 52 49 49 58 57 55 54	79 73 73 76 74 67 69 68 47 42 51 52 48 93 52 48 54	AUGUST 42 38 37 41 39 39 39 40 27 25 33 31 29 29 31 32 30	64 57 55 58 58 54 54 e50 e46 e42 38 35 42 41 37 53 39 41 42	566 688 600 609 588 722 339 48 466 466 465 1400 >15000 13000 8000	\$\frac{40}{33}\$ \\ \frac{31}{34}\$ \\ \frac{38}{38}\$ \\ \frac{38}{32}\$ \\ \frac{11}{11}\$ \\ \frac{29}{29}\$ \\ \frac{28}{25}\$ \\ \frac{25}{27}\$ \\ \frac{24}{49}\$ \\ \frac{29}{80}\$ \\ \frac{800}{800}\$ \\ \frac{580}{800}\$	49 48 43 45 48 46 48 29 36 36 37 34 36 37 34 36 39 >1000 1000 670
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	690 1000 1400 900 >2000 520 1300 880 670 550 410 390 310 230 230 140 150 230	JUNE 350 370 800 590 550 520 380 350 550 550 410 370 310 230 190 140 110 110 140 150 170 630 440	510 520 1100 740 >840 >960 440 700 640 610 480 350 280 210 170 130 140 140 210 570 840 550	80 67 57 46 43 49 64 55 55 52 51 56 63 64 59 57 73 70 67 68 68 68 60 63	JULY 43 39 27 24 27 30 33 32 30 30 30 33 36 39 38 37 38 40 40 41 38 34 32 34	69 54 43 36 36 36 45 43 42 43 47 52 49 49 58 57 55 54	79 73 73 76 74 67 69 68 47 42 51 52 48 93 52 48 54 55 53 49	AUGUST 42 38 37 41 39 39 40 27 25 33 31 29 29 31 32 30 32 37 35	64 57 55 58 58 54 54 650 e46 e42 38 35 42 41 37 53 39 41 42 42 42 44	56 68 60 60 69 58 72 39 48 46 46 46 45 1400 1300 800 670 470	\$EPTEMB: 40 33 31 34 38 32 11 29 29 29 28 25 25 24 29 25 27 49 980 800 580 430 340	49 48 43 45 48 46 48 29 36 36 37 34 33 34 36 39 >1000 1200 1000 670 520 390
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	690 1000 1400 900 >2000 520 1300 880 670 550 410 390 230 140 160 230	JUNE 350 370 800 590 550 520 380 350 550 550 410 370 310 230 190 140 110 140 150 170 630	510 520 1100 740 >840 >960 440 700 640 610 480 380 350 280 210 170 130 140 210 570 840	80 67 57 46 43 49 64 55 55 52 51 56 63 63 70 67 73 70 68 68 68	JULY 43 39 27 24 27 30 33 32 30 30 30 30 38 40 40 41 38 34	69 54 43 36 36 39 46 45 43 42 43 47 52 49 49 58 57 55 54	79 73 73 76 74 67 69 68 47 42 51 52 48 93 52 48 93 52 48 55 53	42 38 37 41 39 39 40 27 25 33 31 29 29 31 32 30	644 577 555 588 588 544 544 650 646 642 388 355 422 41 377 533 399 411 422 4245	56 68 600 69 58 72 399 48 46 46 46 45 1400 1400 1300 800 670	\$EPTEMB: 40 33 31 34 38 38 32 11 29 29 29 28 25 25 24 29 25 27 49 980 800 580 430	49 48 43 45 48 46 48 29 36 36 36 37 34 33 33 34 36 >>1000 1200 1200 1000
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	690 1000 1400 900 >2000 520 1300 880 670 550 410 390 310 230 230 140 160 150 230 1400 1100 660 430	JUNE 350 370 800 590 550 520 380 350 550 550 410 370 230 190 140 110 110 140 150 170 630 440 380 340	510 520 1100 740 >840 >960 440 610 480 380 210 170 130 140 210 570 840 430 430 400	80 67 57 46 43 49 64 55 55 52 51 56 63 64 59 57 73 70 67 68 68 60 63 62 61	JULY 43 39 27 724 27 30 33 32 22 30 30 30 30 31 36 39 38 37 38 40 40 41 38 34 32 34 31 34	69 54 43 36 36 39 46 45 43 47 52 49 49 58 57 55 54 52 48 50 48 47	79 73 73 76 74 67 69 68 47 42 51 52 48 93 52 48 54 55 53 49 75	AUGUST 42 38 37 37 41 39 39 39 40 27 7 25 33 31 29 29 31 32 30 32 37 35 30 30 32	64 57 55 58 58 54 54 650 e46 e42 38 35 42 41 37 53 39 41 42 42 45 44 43 45	566 688 600 609 588 722 339 488 466 466 465 450 1400 1300 800 6770 4770 3770	\$EPTEMB: 40 33 31 34 38 38 32 11 29 29 28 25 25 24 29 25 27 49 980 800 580 430 340 340 140	49 48 43 45 48 46 48 29 36 36 37 34 36 39 >1000 1200 1000 670 520 390 e240 e190
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	690 1000 1400 900 >2000 520 1300 880 670 550 410 390 230 230 140 160 150 460 430 340 220 160	JUNE 350 370 800 590 550 520 380 350 550 550 410 370 310 230 190 140 110 110 140 150 170 630 440 380 340 220 150 120	510 520 1100 740 >840 >960 440 700 640 610 170 130 140 140 210 570 840 550 430 400 280 290 210	80 67 57 46 43 49 64 55 55 52 51 56 63 64 59 57 73 70 67 68 68 60 63 62 61 57 91	JULY 43 39 27 24 27 30 33 32 30 30 30 30 38 40 40 41 38 34 32 34 31 34 36 37 73	69 54 43 36 36 39 46 45 43 42 43 47 52 52 49 49 58 57 55 54 52 48 50 48 47	79 73 73 76 74 67 69 68 47 42 51 52 48 93 52 48 54 55 53 49 54 75	42 38 37 41 39 39 40 27 25 33 31 29 31 32 30 30 30 32 37 35 30 30 31	64 57 55 58 58 54 54 650 e46 e42 38 35 42 41 37 53 39 41 42 42 45 44 43 45	56 68 60 60 69 58 72 39 48 46 46 46 45 1400 >1500 1300 670 670 470 370 	\$EPTEMB: 40 33 31 34 38 32 11 29 29 29 28 25 25 24 29 25 27 49 980 800 580 430 340	49 48 43 45 48 46 48 29 36 36 37 34 33 34 46 39 >1000 1200 670 520 390 e300 e240 e190 130
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	690 1000 1400 900 >2000 520 1300 880 670 550 410 390 310 230 230 140 160 150 230 1400 1100 660 430	JUNE 350 370 800 590 550 520 380 350 550 550 410 370 310 230 190 140 110 110 140 150 170 630 440 380 340 220 150 120 110	510 520 1100 740 >840 >960 440 610 480 380 210 170 130 140 210 570 840 400 500 430 400	80 67 57 46 43 49 64 55 55 52 51 56 63 64 59 57 73 70 67 68 68 60 63 62 61 57 91 160 110	JULY 43 39 27 724 27 30 33 32 22 30 30 30 30 31 36 39 38 37 38 40 40 41 38 34 32 34 31 34 36 37 73 55	69 54 43 36 36 39 46 45 43 47 52 52 49 49 58 57 55 54 52 48 47 47 52 120 84	79 73 73 76 74 67 69 68 47 42 51 52 48 93 52 48 54 75 53 49 75 60 58 56	AUGUST 42 38 37 37 41 39 39 39 40 27 7 25 33 31 29 29 31 32 30 32 37 35 30 30 30 32 33 31 31	64 57 55 58 58 54 54 650 e46 e42 38 35 42 41 37 53 39 41 42 42 45 44 43 45 44 43 45	566 688 600 69 588 722 339 48 46 46 46 45 1500 1300 800 670 470 370 140 1200	SEPTEMB: 40 33 31 34 38 38 32 11 11 29 29 29 28 25 25 24 29 25 27 49 980 800 580 430 340 140 120	49 48 43 45 48 46 48 29 36 36 37 34 36 39 >1000 1200 1000 670 520 390 e240 e190 130 1100 92
1 2 3 3 4 4 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	690 1000 1400 900 >2000 520 1300 880 670 550 410 390 230 230 140 160 150 460 430 340 220 160	JUNE 350 370 800 590 550 520 380 350 550 550 410 370 310 230 190 140 110 110 140 150 170 630 440 380 340 220 150 120	510 520 1100 740 >840 >960 440 700 640 610 170 130 140 140 210 570 840 550 430 400 280 290 210	80 67 57 46 43 49 64 55 55 52 51 56 63 64 59 57 73 70 67 68 68 60 63 62 61 57 91	JULY 43 39 27 24 27 30 33 32 30 30 30 30 38 40 40 41 38 34 32 34 31 34 36 37 73	69 54 43 36 36 39 46 45 42 43 47 52 49 49 58 57 55 4 52 48 47 47 52 120	79 73 73 76 74 67 69 68 47 42 51 52 48 93 52 48 54 55 53 49 54 75	42 38 37 41 39 39 40 27 25 33 31 29 31 32 30 30 30 32 37 35 30 30 31	644 577 555 588 588 544 544 650 e466 e422 388 355 422 411 377 533 399 411 422 425 444 443 455 445 445 443	56 68 60 60 69 58 72 39 48 46 46 46 45 140 >1500 1300 670 470 370 	\$\frac{40}{33}\$ \\\ \delta \\ \delta	49 48 43 45 48 46 48 29 36 36 37 34 33 34 46 39 >1000 1200 670 520 390 e300 e240 e190 130
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	690 1000 1400 900 >2000 520 1300 880 670 550 410 390 230 140 160 460 430 340 220 160 130	JUNE 350 370 800 800 590 550 520 380 350 550 550 410 370 310 230 190 140 110 110 110 140 150 170 630 440 380 340 220 150 120 110 72	510 520 1100 740 >840 >960 440 610 480 380 350 210 170 130 140 210 550 430 400 280 290 290 96	80 67 57 46 43 49 64 55 55 52 51 56 63 64 59 57 73 70 67 68 68 68 60 63 62 61 160 110 83	JULY 43 39 27 24 27 30 33 32 23 30 30 30 30 31 36 39 38 37 38 40 40 40 41 41 38 34 36 37 73 35 55 47	69 54 43 36 36 39 46 45 43 42 43 47 52 49 49 58 57 55 4 47 52 48 47 52 120 88	79 73 73 76 74 67 69 68 47 42 51 52 48 93 52 48 93 52 48 75 55 57 60 58 82	AUGUST 42 38 37 41 39 39 40 27 25 33 31 29 29 31 32 30 32 37 35 30 30 32 37 35 30 30 32 37 35 36	64 57 55 58 58 54 54 e50 e46 e42 38 35 42 41 37 53 39 41 42 45 44 44 45 44 45 44 45 44 45 46 46	56 68 60 60 69 58 72 39 48 46 46 46 45 1400 1300 800 670 470 370 140 120 120 10 86	SEPTEMB: 40 33 31 34 38 38 32 11 129 29 29 28 25 25 24 29 25 27 49 980 800 580 430 340 140 120 100 86 74	49 48 43 45 48 46 48 29 36 36 37 34 33 33 34 36 39 >1000 1200 1200 1200 1200 1200 1200 120

e Estimated

> Actual value is known to be greater than the value shown

07144200 LITTLE ARKANSAS RIVER AT VALLEY CENTER, KS

LOCATION.--Lat $37^{\circ}49^{\circ}56^{\circ}$, long $97^{\circ}23^{\circ}16^{\circ}$, river gage is in NE $^{1}/_{4}$ NW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.36, T.25 S., R.1 W., Sedgwick County, Hydrologic Unit 11030012, on right bank at downstream side of county highway bridge, 0.5 mi west of Valley Center, and at mile 17.5. Little Arkansas River Floodway gage is in NE $^{1}/_{4}$ NE $^{1}/_{4}$ NE $^{1}/_{4}$ sec.34, T.25 S., R.1 W., on right bank at downstream side of county highway bridge, and 1.2 mi northwest of river gage.

DRAINAGE AREA.--1,327 mi², of which about 77 mi² is probably noncontributing.

PERIOD OF RECORD. -- June 1922 to current year. Monthly discharge only for some periods, published in WSP 1311.

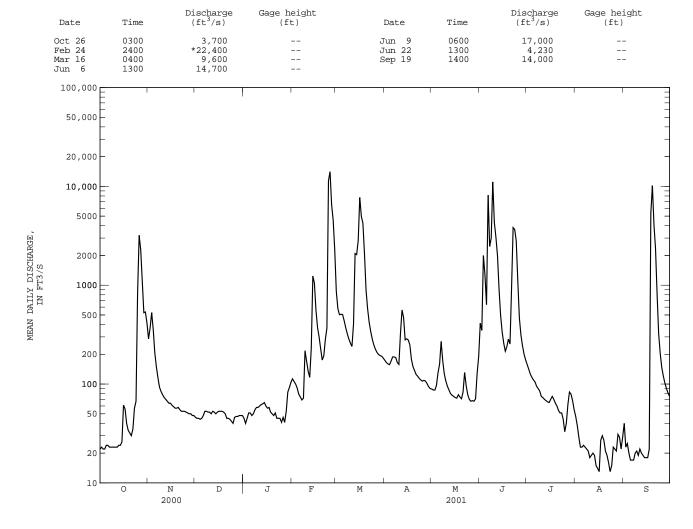
REVISED RECORDS.--WSP 1037: 1944. WSP 1117: Drainage area. WSP 1241: 1923, 1924-26(M), 1928-29(M), 1930(M, m), 1931(M), 1932(M, m), 1933(M), 1934, 1937(M), 1949(M). WSP 1711: 1958.

GAGE.--River gage is water-stage recorder. Datum of river gage is 1,325.66 ft above sea level. Prior to Feb. 12, 1935, nonrecording gage at site 2.0 mi downstream at different datum. Feb. 12, 1935, to July 1, 1951, water-stage recorder, July 2, 1951, to Feb. 16, 1952, nonrecording gage, and Feb. 17, 1952, to Sept. 30, 1974, water-stage recorder at present site and at datum 2.00 ft higher. Floodway gage is water-stage recorder. Datum of floodway gage is 1,340.00 ft above sea level (levels by Wichita-Valley Center Flood Control Project).

REMARKS.--Records poor. Natural flow affected by diversions and ground-water withdrawal for irrigation and municipal supply. Satellite telemeter at river station and floodway station. Since May 1957, part of high-water flow by-passes river gage through floodway channel for which separate records are computed; figures representing combined discharge are given herein. Discharge through floodway occurred only on the days given in the following table:

Dat	е	Discharge (ft ³ /s)	Dat	е	Discharge (ft ³ /s)	Da	te	Discharge (ft ³ /s)	Da	ite	Discharge (ft ³ /s)	Date	Discharge (ft ³ /s)
Oct.	25 26	61 538	Feb. Feb.	27 28	2,120 275	Mar. Mar.	17 18	2,290 1,770	June June	9 10	8,310 1,890	June 23 June 24	1,110 449
Oct.	27	36	Mar.	13	161	Mar.	19	181	June	11	901	Sept. 18	3,690
Feb.	24	8,760	Mar.	14	74	June	6	5,590	June	12	196	Sept. 19	7,340
Feb.	25	11,000	Mar.	15	917	June	7	468	June	21	22	Sept. 20	1,490
Feb.	26	3,900	Mar.	16	4,780	June	8	1,260	June	22	1,260	Sept. 21	278

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of $3,000~{\rm ft}^3/{\rm s}$ and maximum (*):



07144200 LITTLE ARKANSAS RIVER AT VALLEY CENTER, KS--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES

DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG 1 22 287 46 45 113 866 174 89 412 157 47 2 23 369 45 e40 106 580 165 87 e350 141 38	40 23
2 23 369 45 e40 106 580 165 87 e350 141 38	23
3 22 529 45 e45 100 503 160 87 e2000 126 29 4 22 356 44 51 91 508 157 97 1270 117 23 5 24 207 45 51 79 505 e171 130 636 e110 23	20
6 24 150 48 48 74 439 188 159 8170 e105 24 7 23 116 53 50 69 373 188 270 2470 e95 23 8 23 93 53 55 72 323 185 173 3000 e90 22 9 e23 84 52 58 217 286 165 127 11100 e85 21 10 e23 78 52 58 171 260 158 107 4300 e75 18	20 21
11 e23 73 e50 60 135 240 325 95 3070 73 19 12 e23 70 e53 62 117 404 562 87 2000 70 20 13 e24 67 e52 63 229 2090 470 80 917 68 19 14 e24 64 e50 65 1240 2040 280 77 494 66 15 15 e26 64 e52 60 1050 2840 287 75 336 65 14	19 18
16 e61 61 53 57 556 7730 279 73 259 70 13 17 56 59 e53 58 374 4970 249 72 215 75 27 18 40 57 e53 52 300 4240 178 78 239 70 30 19 34 57 e52 e50 227 2080 150 74 285 64 27 20 32 58 e50 48 175 896 137 71 254 60 21	22 5320 10200
21 30 55 e45 51 193 580 125 83 932 54 19 22 35 53 e45 45 283 420 120 131 3830 51 16 23 57 53 e44 45 369 340 114 96 3670 51 13 24 67 53 e42 45 11400 284 110 78 2800 44 15 25 828 52 e40 41 14100 248 107 70 1090 33 23	821 325 204
26 3200 51 e46 46 6520 225 109 67 464 40 22 27 2280 50 e47 41 4540 209 107 68 313 62 21 28 1090 50 e47 53 2260 199 101 67 243 83 31 29 527 48 e48 83 194 94 71 200 79 29 30 536 48 e48 92 191 90 128 175 68 22 31 413 e48 104 183 192 55 29	102 90 81
MEAN 311 114 48.4 55.5 1613 1137 190 102 1850 77.5 23.0 MAX 3200 529 53 104 14100 7730 562 270 11100 157 47 MIN 22 48 40 40 69 183 90 67 175 33 13 AC-FT 19110 6770 2980 3420 89570 69910 11320 6270 110100 4760 1410	10200 17
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2001, BY WATER YEAR (WY)	
OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG	SEP
MEAN 273 205 103 88.8 211 367 391 570 614 464 231 MAX 3873 2969 953 589 2241 4392 3857 4710 3076 6794 1996 (WY) 1974 1980 1945 1962 1993 1973 1944 1993 1965 1993 1959 MIN 5.06 10.9 11.2 9.37 11.8 17.0 17.1 17.0 12.5 7.14 4.29 (WY) 1957 1957 1957 1956 1956 1956 1934 1991 1956	259 1471 1977 3.49 1956
SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 19	23 - 2001
LOWEST DAILY MEAN 19 Sep 3 13 Aug 16 1.1 Oc ANNUAL SEVEN-DAY MINIMUM 21 Sep 2 17 Aug 10 1.9 Oc MAXIMUM PEAK FLOW 22400 Feb 24 32000 Ap MAXIMUM PEAK STAGE 22205 Ap	

e Estimated

Discharge

Gage height

07144300 ARKANSAS RIVER AT WICHITA, KS

LOCATION.--Lat $37^{\circ}38^{\circ}41^{\circ}$, long $97^{\circ}20^{\circ}06^{\circ}$, river gage is in SE $^{1}/_{4}$ SE $^{1}/_{4}$ NE $^{1}/_{4}$ sec.5, T.28 S., R.1 E., Sedgwick County, Hydrologic Unit 11030013, on right bank at downstream side of bridge on Broadway Street in Wichita, 3.7 mi downstream from mouth of Little Arkansas River and at mile 759.7. Big Slough-Cowskin Floodway gage is in sec.11, T.27 S., R.1 W., Sedgwick County, on right bank at downstream side of bridge on Zoo Boulevard in Wichita, 1.0 mi downstream from control structure, and 6.5 mi northwest of Broadway Street gage.

DRAINAGE AREA.--40,490 mi², of which 7,263 mi² is probably noncontributing.

Discharge

PERIOD OF RECORD.--July 1934 to current year. Gage-height records collected at site 3.2 mi upstream since 1897 are contained in reports of U.S.Weather Bureau.

REVISED RECORDS.--WSP 1241: 1940, 1944. WSP 1341: Drainage area.

GAGE.--River gage is water-stage recorder. Datum of river gage is 1,262.42 ft above sea level. Prior to Oct. 1, 1985, at datum 5.00 ft higher than present datum. See WSP 1921 for history of changes prior to Oct. 1, 1968. Floodway gage is water-stage recorder. Datum of floodway gage is 1,300.00 ft above sea level (levels by Wichita-Valley Center Flood Control Project).

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow slightly regulated since 1943 by John Martin Reservoir (station 07130000). Natural flow affected by transmountain diversions, storage reservoirs, power develop-ments, ground-water withdrawals, diversions for irrigation, city of Wichita weir 2.2 mi upstream, and return flow from irrigated areas. Since May 1957, part of high-water flow by-passes river gage through floodway channel for which separate records are computed; figures representing floodway discharge and combined discharge are given herein. Satellite telemeter at station. Discharge through floodway occurred only on days given in the following table:

Dat	e.	Discharge (ft ³ /s)	Dat	e	Discharge (ft ³ /s)	Da	te	Discharge (ft ³ /s)	Dat	:e	Discharge (ft ³ /s)	Date	Discharge (ft ³ /s)
		, - , ,			, . ,			, , , , ,			, , , , , ,		, . ,
Oct.	26	190	Feb.	27	402	Mar.	18	.70	June	10	1,510	Sept. 19	120
Oct.	27	6.1	Feb.	28	119	June	6	1,670	June	11	225		
Feb.	24	1,860	Mar.	15	2.6	June	7	355	June	12	71		
Feb.	25	5,010	Mar.	16	1,450	June	8	44	June	13	9.5		
Feb.	26	1,820	Mar.	17	54	June	9	3,930	June	14	17		

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of May 18, 1877, and July 8, 1904, reached stages of 21 ft and 20.3 ft, respectively, river gage site and datum then in use (from reports of U.S. Weather Bureau).

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,700 ft³/s and maximum (*):

Gage height

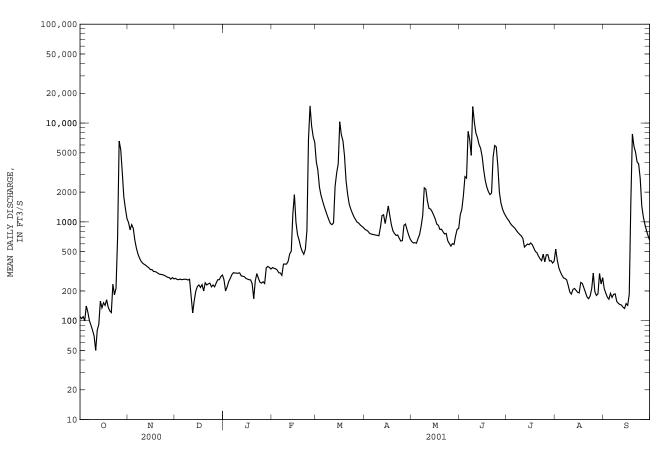
Date	Tir	ne	(ft ³ /s)		(ft)		Date	Tim	е	(ft ³ /s)		ft)
Oct 26 Feb 25 Mar 16 Jun 6	15) 05) 07) 19)	00	8,820 *16,900 11,800 13,500		 		Jun 9 Jun 22 Sep 19	110 230 111	0	16,500 6,010 8,550		
		DISCHA	RGE, CUBIC	FEET PE		, WATER YE LY MEAN VA		R 2000 TC	SEPTEMBE	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e110	984	268	e260	345	4060	843	632	1180	1080	530	211
2	e105	829	262	e200	339	3330	825	612	1340	1030	411	190
3	e110	937	260	e220	335	2250	804	616	1850	967	343	173
4	e100	864	264	249	326	1860	767	608	2870	921	311	165
5	141	657	260	268	306	1630	754	679	2770	891	288	189
6	122	544	262	292	304	1440	747	744	8250	858	271	172
7	e100	474	263	306	288	1290	741	904	6830	813	267	185
8	e90	430	262	304	374	1160	735	1160	4700	776	259	187
9	e80	400	258	303	374	1050	730	2210	14700	746	227	157
10	e70	382	263	302	374	963	724	2140	10200	721	195	150
11	e50	372	177	305	400	937	886	1630	7910	681	186	146
12	e80	364	e120	284	474	978	1160	1370	7100	556	207	144
13	92	352	e160	282	506	2280	1180	1350	6070	578	212	137
14	158	343	e200	279	1200	3120	962	1270	5550	597	203	133
15	135	329	222	268	1890	3860	1170	1170	4570	588	194	149
16	152	329	230	264	989	10300	1450	1070	3340	612	191	143
17	143	315	217	260	742	7610	1150	948	2610	589	244	185
18	163	314	232	259	655	6650	931	924	2240	543	238	1550
19	137	309	e200	237	558	4690	808	838	2020	503	215	7750
20	126	300	242	167	503	2620	762	842	1890	487	194	5830
21	121	295	230	253	470	1910	729	794	1960	450	174	5080
22	234	294	236	300	529	1520	737	755	4550	423	167	4050
23	183	291	e240	268	818	1350	682	764	5920	405	178	3860
24	213	287	e220	245	6860	1230	639	645	5740	472	211	2750
25	692	281	e230	240	14900	1130	648	605	3710	394	303	1450
26 27 28 29 30 31	6580 5400 3160 1780 1360 1080	275 273 263 273 265	e220 e240 e260 e260 e280 e290	248 238 343 354 346 333	9350 7280 6370 	1060 996 975 935 904 879	923 951 830 737 670	569 602 592 721 840 859	1990 1550 1350 1230 1150	464 466 402 406 383 401	197 180 187 301 235 273	1120 944 819 726 653
MEAN	744	421	236	273	2066	2418	856	950	4238	619	245	1313
MAX	6580	984	290	354	14900	10300	1450	2210	14700	1080	530	7750
MIN	50	263	120	167	288	879	639	569	1150	383	167	133
AC-FT	45750	25040	14540	16810	114800	148700	50930	58440	252200	38090	15060	78150

07144300 ARKANSAS RIVER AT WICHITA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB	MAR APR	MAY	JUN	JUL	AUG	SEP
MEAN 927 696 MAX 12900 5957 (WY) 1974 1999 MIN 10.2 30.7 (WY) 1957 1957	469 434 2963 2153 1974 1974 23.4 18.8 1957 1957	702 5278 1949 53.7 1957	1178 1256 9361 8498 1973 1973 63.2 58.1 1935 1935	9215 1951 119	1989 8851 1951 119 1956	1646 14620 1993 46.8 1991	957 9202 1950 14.2 1956	881 3932 1973 7.90 1956
SUMMARY STATISTICS	FOR 2000 CALE	NDAR YEAR	FOR 2001	WATER YEAR		WATER Y	EARS 1935	- 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS	1129 18300 50 80 819300 2430 472 161	Mar 24 Oct 11 Oct 7	1186 14900 50 80 16900 50 858400 2970 503	Feb 25 Oct 11 Oct 7 Feb 25 Oct 11		1069 3850 151 41100 5.0 5.4 48400 3.0 774500 2280 445 106	Oct Oct Oct 3	1993 1991 5 1993 5 1956 2 1956 1 1979 3 1934

e Estimated



07144480 COWSKIN CREEK AT 119TH STREET AT WICHITA, KS

LOCATION.--Lat 37°42'05", Long 97°28'49", in SW $^1/_4$ SW $^1/_4$ NW $^1/_4$ sec.18, T.27 S.,R.1 W., Sedgwick County, Hydrologic Unit 11030013, at left downstream end of bridge on 119th St West and at mile 46.1.

DRAINAGE AREA.--86.0 mi².

AC-FT

PERIOD OF RECORD. -- April 2001 to September 2001.

GAGE.--Water-stage rcorder. Datum of gage is 1,312.40 ft above sea level (from City of Wichita benchmark).

REMARKS.--Records fair. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY NOV DEC MAR AUG SEP OCT JAN FEB APR MAY JUIN JUL 7.5 2.2 1 e8.0 4.3 8.8 1.2 2 -----------------e7.9 e7.8 52 2.0 1.2 5.5 4.4 39 ___ ---4 ___ ___ ___ ___ e7.7 4 4 11 1 9 1 1 4.0 5 4.1 -----------------e7.5 4.6 36 1.6 1.1 7.7 7.9 141 3.9 3.7 6 7 5.2 1.6 1.1 ___ ___ ------------------5.7 41 1.0 1.4 8 ------------------8.0 257 9 7.6 5 5 435 1.3 1 0 3 3 10 6.3 72 1.2 4.6 1.0 3.1 11 ---------4.6 7.6 4.1 19 1.2 1.0 3.0 ---4.0 9.6 1.2 2.9 12 1.1 ------------------6.1 13 6.8 3.8 1.1 1.4 2.8 2.7 14 6.8 3.2 1.1 1.6 15 8.7 2.8 4.4 1.1 1.5 2.8 2.7 16 12 2.5 4.0 1.2 1.2 7.7 2.9 2.3 3.5 1.2 2.1 2.2 1.2 18 ___ ___ ___ ___ ___ ___ 6.4 3.6 1.6 19 ------------------19 6.5 3.4 1.6 14 20 2.2 3.2 1.9 6.6 1.5 6.5 21 6.4 2.1 3.5 1.2 1.5 3.7 6.3 2.0 11 1.5 7.0 5.9 5.3 1.9 1.8 1.5 2.3 23 ___ ---___ ------___ 1.3 ___ 24 1.6 25 5.2 3.5 2.3 2.3 1.9 1.8 26 4.9 1.9 3.1 2.2 1.7 1.9 27 ---------------1.9 2.8 2.3 28 ___ ___ ___ ___ ___ ___ $\begin{smallmatrix}4.6\\4.4\end{smallmatrix}$ 2.0 2.6 $1.4 \\ 1.1$ 1.7 1.6 29 2.2 1.6 1.6 30 4.5 2.3 2.5 12 31 ___ ___ ___ ___ ___ ___ 7.0 1 1 MEAN 6.75 3.48 39.9 1.50 1.77 4.18 ___ ___ ___ ___ ___ ---7.0 1.8 435 2.3 2.3 MAX 12 12 19 1.0 MIN ---------1.6

401

214

2370

92

109

249

07144480 COWSKIN CREEK AT 119TH STREET AT WICHITA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2001, BY WATER YEAR (WY)

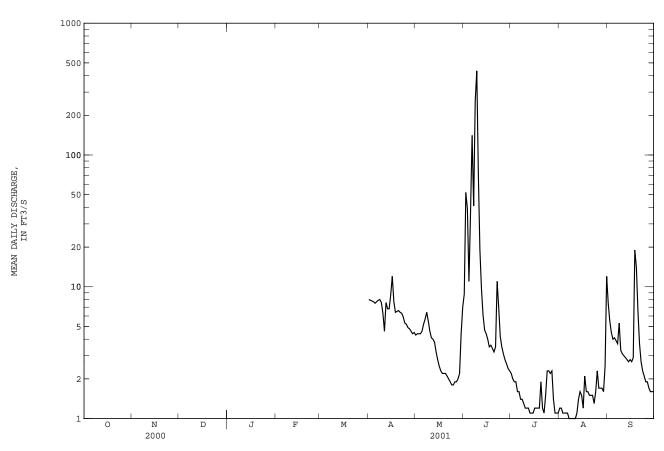
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN							6.75	3.48	39.9	1.50	1.77	4.18
MAX							6.75	3.48	39.9	1.50	1.77	4.18
(WY)							2001	2001	2001	2001	2001	2001
MIN							6.75	3.48	39.9	1.50	1.77	4.18
(WY)							2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS

FOR 2001 WATER YEAR

HIGHEST DAILY MEAN	435	Jun 9
LOWEST DAILY MEAN	1.0	Aug 7
ANNUAL SEVEN-DAY MINIMUM	1.0	Aug 5
MAXIMUM PEAK FLOW	650	Jun 8
MAXIMUM PEAK STAGE	14.47	Jun 8
INSTANTANEOUS LOW FLOW	.97	Jul 21
10 PERCENT EXCEEDS	8.4	
50 PERCENT EXCEEDS	2.8	
90 PERCENT EXCEEDS	1.2	

e Estimated



07144550 ARKANSAS RIVER AT DERBY, KS

LOCATION.--Lat $37^{\circ}32'34"$, long $97^{\circ}16'31"$, in SE $^{1}/_{4}$ SW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.12, T.29 S., R.1 E., Sedgwick County, Hydrologic Unit 11030013, on left bank at downstream side of county highway bridge at west edge of Derby, 0.9 mi downstream from mouth of bypass channel, and at mile 749.5.

DRAINAGE AREA.--40,830 mi², of which 7,263 mi² is probably noncontributing.

PERIOD OF RECORD. -- October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,229.95 ft above sea level (city of Wichita bench mark).

REMARKS.--Records good. Flow slightly regulated since 1943 by John Martin Reservoir (station 07130000). Low flow regulated by city of Wichita low-water dam. Natural flow affected by numerous diversions upstream from station. Satellite telemeter at station.

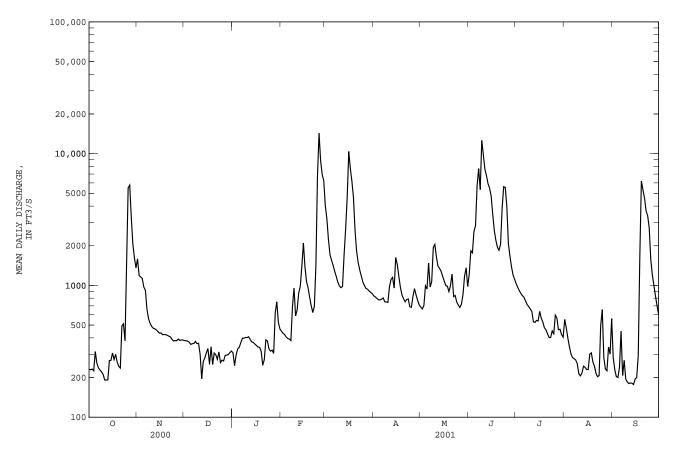
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of $4,000~{\rm ft}^3/{\rm s}$ and maximum (*):

Date	Tir	me	Discharge (ft ³ /s)	e Gag	ge height (ft)		Date	Tim	e	Discharge (ft ³ /s)		height (ft)
Oct 26 Feb 25 Mar 16 Jun 6	200 074 130 240	45 00	7,870 *16,000 11,900 11,000	,	7.35 *10.06 8.80 8.51		Jun 9 Jun 23 Sep 19	160 030 140	0	14,800 5,690 6,760		9.72 6.23 6.85
		DISCHA	RGE, CUBIC	C FEET PI		WATER YE Y MEAN VA	AR OCTOBER	2000 TO) SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	231	1590	382	308	449	4020	833	685	1220	1030	552	283
2	229	1190	380	246	433	3220	818	663	1830	967	477	229
3	232	1160	378	296	424	2230	796	703	1770	912	399	203
4	225	1130	371	330	406	1710	779	993	2570	869	343	200
5	315	973	357	339	396	1550	777	939	2840	836	302	239
6	257	921	361	368	392	1420	787	1480	5690	813	284	451
7	237	662	363	397	382	1280	804	972	7700	761	278	207
8	228	561	376	398	688	1170	751	1070	5330	716	272	270
9	221	517	362	403	955	1060	749	1940	12600	691	256	195
10	211	489	364	402	588	992	743	2050	9800	663	214	185
11	192	474	300	408	652	961	976	1650	7610	634	206	180
12	191	469	196	389	877	984	1110	1400	6800	530	216	182
13	192	460	265	373	981	1700	1150	1350	5910	524	244	181
14	269	447	282	369	1400	2690	955	1280	5460	543	239	177
15	270	434	309	359	2100	4700	1630	1170	4760	537	230	195
16	307	436	332	350	1380	10400	1440	1080	3460	635	230	200
17	274	423	252	341	1070	7700	1170	998	2610	566	301	294
18	300	424	342	339	959	6170	966	986	2200	528	308	1670
19	262	423	252	317	811	4630	845	898	1950	478	263	6200
20	243	419	307	248	702	2620	793	1000	1850	461	244	5300
21	236	412	298	273	623	1820	751	1220	2050	430	215	4600
22	494	407	275	386	695	1490	782	823	3840	403	203	3670
23	511	390	313	379	1430	1310	790	839	5610	402	207	3390
24	380	379	260	330	6810	1180	689	747	5550	452	499	2730
25	1450	382	271	317	14300	1060	682	710	4000	430	654	1570
26 27 28 29 30 31	5500 5770 3290 2060 1620 1360	380 392 383 386 385	267 294 296 299 309 318	323 305 620 751 524 467	8840 6960 6230 	1000 948 936 908 885 866	824 946 847 772 712	681 721 855 1180 1360 981	2070 1670 1380 1200 1110	595 566 461 465 423 405	283 232 225 340 301 561	1200 1000 832 701 603
MEAN	889	583	314	376	2212	2375	889	1078	4081	604	309	1245
MAX	5770	1590	382	751	14300	10400	1630	2050	12600	1030	654	6200
MIN	191	379	196	246	382	866	682	663	1110	402	203	177
AC-FT	54660	34710	19300	23120	122800	146000	52890	66300	242900	37140	19000	74060

07144550 ARKANSAS RIVER AT DERBY, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	1178 13000 1974 102 1992	1020 6293 1999 162 1981	592 2916 1974 173 1991	496 2190 1974 179 1979	847 3965 1993 163 1989	1626 9439 1973 183 1989	1631 8949 1973 178 1989	1799 8939 1993 237 1992	1928 6640 1995 415 1991	1476 13450 1993 185 1991	943 2774 1987 168 1984	963 3640 1973 142 1980
SUMMARY	STATISTI	ICS	FOR 2	2000 CALEI	NDAR YEAR	Ι	FOR 2001	WATER YEAR		WATER Y	EARS 1969	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT	MEAN F ANNUAL ME F DAILY ME F DAILY ME F SEVEN-DAY M PEAK FLO M PEAK STA FANEOUS LO RUNOFF (F	EAN EAN AN MINIMUM DW AGE DW FLOW		1241 16100 191 210	Mar 24 Oct 12 Oct 7		1233 14300 177 185 16000 10. 86 892900	Feb 25 Sep 14 Sep 9 Feb 25 06 Feb 25 Dec 12		1209 3621 259 44300 83 90 58300 16.49 62	Nov Oct Oct Nov 5 Nov Oct	1993 1991 2 1998 6 1991 2 1991 2 1998 2 1998 5 1991
10 PERC 50 PERC	CENT EXCES CENT EXCES CENT EXCES	EDS EDS		2340 623 265			2770 620 239			2600 542 194		



07144780 NORTH FORK NINNESCAH RIVER ABOVE CHENEY RESERVOIR, KS

LOCATION.--Lat $37^{\circ}50'41"$, long $97^{\circ}56'09"$, in NE $^{1}/_{4}$ SE $^{1}/_{4}$ NE $^{1}/_{4}$ sec.19, T.25 S., R.6 W., Reno County, Hydrologic Unit 11030014, on right bank at upstream side of highway bridge, 12 mi south of Hutchinson, 18.1 mi upstream from Cheney Dam, and at mile 33.8.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--713 mi^2 , of which 237 mi^2 is probably noncontributing.

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,456.05 ft above sea level. Prior to Feb. 12, 1996, at site 4 mi downstream, datum 1,431.75 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft^3/s and maximum (*):

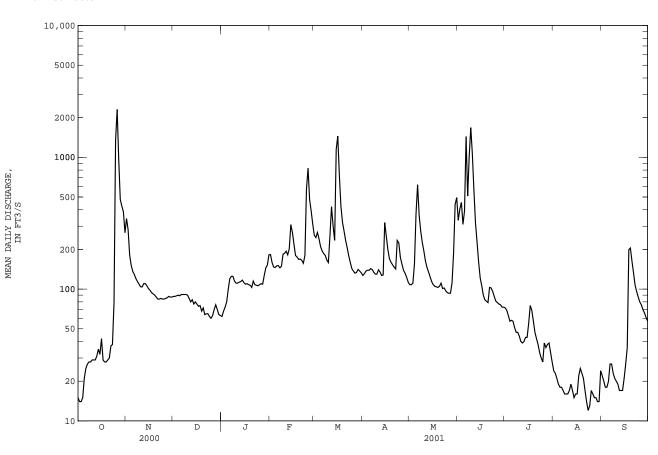
Date	Tim	e	Discharge (ft ³ /s)	Gag	e height (ft)		Date	Tim	e	Discharge (ft ³ /s)		height ft)
Oct 26 Mar 15 Jun 6	050 180 090	0	*2,750 2,040 2,080		10.97 10.43 10.46		Jun 8 Jun 9			2,140 2,200		0.81
		DISCHA	ARGE, CUBIC	FEET PE		WATER YE Y MEAN VA		BER 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	15 14 14 15 21	343 282 181 151 136	88 88 89 90 89	e62 e68 e73 e80 e100	183 159 147 146 150	256 246 269 241 210	127 131 137 139 139	108 108 111 155 371	333 405 455 310 391	72 69 63 57 58	24 23 21 19 18	22 20 18 18 20
6 7 8 9 10	25 27 28 28 29	129 120 114 109 104	91 91 91 91 90	e120 e125 e125 115 111	151 145 149 184 187	195 186 180 166 159	143 141 134 130 130	619 364 276 226 195	1440 508 1020 1680 1060	57 51 47 47 44	18 17 16 16 16	27 27 23 21 20
11 12 13 14 15	29 29 31 35 32	104 110 110 106 101	e85 e80 e83 e77 e80	111 113 114 117 112	194 182 202 308 270	255 422 303 234 1150	140 135 127 128 320	164 146 135 124 114	565 318 228 161 122	40 39 40 43 e43	17 19 17 15 16	19 17 17 17 21
16 17 18 19 20	42 29 28 28 29	98 94 92 90 87	e77 e74 e75 e68 e72	109 110 108 107 103	219 180 175 168 169	1450 738 427 322 276	253 200 170 160 153	108 105 104 103 105	106 90 83 81 79	e55 75 69 57 47	16 22 25 23 21	27 36 199 205 163
21 22 23 24 25	30 37 38 79 1350	84 84 85 84	e64 e65 e65 e62 e60	115 108 107 106 108	165 157 180 577 827	235 206 179 159 143	147 142 234 224 174	111 101 102 97 94	103 102 96 88 81	42 38 33 30 28	17 14 12 13 17	133 107 96 87 80
26 27 28 29 30 31	2310 964 479 426 386 268	85 86 88 87 87	e63 e70 e76 e70 e64 e63	110 109 127 145 152 182	477 391 311 	137 132 134 141 137 133	155 139 132 123 113	93 93 111 187 439 495	79 77 76 73 73	39 36 38 39 33 28	16 15 15 14 14 24	76 70 66 61 57
MEAN MAX MIN AC-FT	222 2310 14 13680	117 343 84 6970	77.1 91 60 4740	111 182 62 6850	241 827 145 13390	304 1450 132 18690	157 320 113 9360	183 619 93 11230	343 1680 73 20400	47.0 75 28 2890	17.7 25 12 1090	59.0 205 17 3510

07144780 NORTH FORK NINNESCAH RIVER ABOVE CHENEY RESERVOIR, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	173 1632 1980 15.0 1992	102 305 1982 36.0 1967	100 252 1974 39.5 1967	99.7 202 1980 50.3 1977	133 535 1993 54.7 1967	213 866 1987 44.7 1967	217 1097 1974 48.3 1972	237 1805 1995 32.5 1967	194 820 1995 16.5 1966	138 1392 1987 13.0 1968	65.0 351 1977 8.08 1968	100 968 1977 6.80 1971
SUMMARY	STATISTI	ICS	FOR 2	2000 CALEN	DAR YEAR	FC	OR 2001 WA	ATER YEAR		WATER YEA	ARS 1966	- 2001
	MEAN 'ANNUAL N ANNUAL ME			126			156			148 388 54.3		1987 1968
LOWEST	DAILY MEA			3050 6.7 7.3	Mar 24 Sep 19 Sep 10		2310 12 15	Oct 26 Aug 23 Aug 22		39700 .00 .56	Jul	30 1979 14 1966 14 1966
MAXIMUM MAXIMUM	PEAK FLO PEAK STA	OW AGE		7.3	sep 10		2750 10.97	Oct 26		87000 11.65	Oct :	30 1979 30 1979 14 1966
10 PERC 50 PERC	RUNOFF (A ENT EXCES ENT EXCES ENT EXCES	EDS EDS		91520 192 81 16			112800 309 103 21	.5		107000 224 77 24		

e Estimated



07144780 NORTH FORK NINNESCAH RIVER ABOVE CHENEY RESERVOIR, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. -- November 1998 to current year.

PERIOD OF DAILY RECORD. --

SPECIFIC CONDUCTANCE: November 1998 to current year.

pH: November 1998 to current year.
WATER TEMPERATURE: November 1998 to current year.
DISSOLVED OXYGEN: November 1998 to current year.

TURBIDITY: November 1998 to current year.

INSTRUMENTATION. -- Multiparameter water-quality monitor.

REMARKS.--Records good. Interruptions in record are due to ice condtions or malfunction of the recording instrument or sensors. Instruments used to measure trubidity conform to ISO 7027 standards.

EXTREMES FOR PERIOD OF RECORD .--

SPECIFIC CONDUCTANCE: Maximum, 1,530 microsiemens/cm, Dec. 12, 2000; minimum, 122 microsiemens/cm, Sept. 18, 2001. pH: Maximum, 9.4 standard units, Sept. 29, 2001; minimum, 7.3 standard units, June 19, 2001. WATER TEMPERATURE: Maximum, 37.5 oC, July 14, 2000; minimum, -.1 oC, Dec. 30, 1999. DISSOLVED OXYGEN: Maximum 18.4 mg/L, Jan. 27, 2001; minimum, 2.3 mg/L, July 16, 1999. TURBIDITY: Maximum, >1,700 NTU, Sept. 17, 2001; minimum, 1.1 NTU, Oct. 1, 2001.

EXTREMES FOR CURRENT YEAR. --

TREMES FOR CURRENT YEAR.-
SPECIFIC CONDUCTANCE: Maximum, 1,530 microsiemens/cm, Dec. 12; minimum, 122 microsiemens/cm, Sept. 18. pH: Maximum, 9.4 standard units, Sept. 29; minimum, 7.3 standard units, June 19.

WATER TEMPERATURE: Maximum, 37.3°C, July 29; minimum, -0.1°C, Feb. 9.

DISSOLVED OXYGEN: Maximum, 18.4 mg/L, Jan. 27; minimum, 2.6 mg/L, Aug. 2.

TURBIDITY: Maximum, >1,700 ntu, Sept. 17; minimum, 1.1 ntu, Oct. 1.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBE	ર	N	OVEMBER		D	ECEMBER			JANUARY	?
1 2 3 4 5	1120 1110 1090 1070 1060	1090 1070 1040 1060 996	1110 1090 1070 1060 1020	1160 1020 1230 1300 1290	770 804 1020 1230 1270	949 914 1130 1270 1280	1290 1290 1300 1280 1290	1270 1280 1270 1270 1270	1280 1290 1280 1270 1280	1370 1390 1410 1370 1310	1350 1370 1340 1270 1220	1360 1380 1380 1320 1270
6 7 8 9 10	1130 1130 1150 1160 1230	1060 1090 1090 1140 1140	1090 1120 1120 1150 1180	1310 1340 1340 1350 1360	1280 1310 1330 1340 1340	1290 1320 1340 1340 1350	1290 1280 1290 1300 1330	1260 1270 1270 1280 1300	1280 1270 1280 1300 1300	1270 1280 1320 1290 1290	1230 1250 1250 1260 1250	1250 1270 1280 1270 1270
11 12 13 14 15	1240 1230 1220 1160 1160	1210 1210 991 1010	1220 1220 e1150 1090 1150	1350 1310 1310 1330 1330	1290 1240 1300 1310	1330 e1280 1280 1310 1320	1390 1530 1500 1430 1350	1310 1330 1420 1330 1300	1350 1450 1460 1390 1320	1280 1240 1250 1260 1280	1220 1220 1230 1230 1260	1240 1230 1240 1240 1270
16 17 18 19 20	1120 1130 1130 1210 1220	903 1100 1060 1130 1200	1020 1120 1080 1170 1210	1350 1310 1300 	1310 1300 1280 	e1330 1320 1300 e1290 e1290	1340 1380 1390 1410 1380	1290 1340 1330 1370 1320	1300 1370 1360 1390 1360	1280 1260 1270 1320 1420	1250 1230 1200 1240 1230	1270 1240 1230 1270 1320
21 22 23 24 25	1230 1220 1200 1200 669	1170 1070 1110 270 162	1210 1140 1170 650 344	1290 1280 1270 1280	1280 1270 1260 1260	e1280 1280 1280 1270 1270	1400 1440 1410 1450 1450	1360 1390 1340 1370 1400	1380 1410 1390 1420 1430	1300 1330 1270 1250 1260	1220 1230 1240 1230 1230	1260 1270 1250 1240 1250
26 27 28 29 30 31	424 680 897 935 1010 1160	276 424 680 896 905 1010	345 550 796 912 953 1100	1280 1270 1270 1280 1290	1260 1260 1260 1260 1270	1270 1260 1270 1270 1280	1440 1430 1410 1380 1350 1360	1420 1370 1360 1300 1300 1320	1430 1400 1390 1340 1330 1340	1240 1260 1250 1080 1160 1200	1220 1230 1050 1050 1060 1160	1230 1240 1140 1070 1130 1180
MONTH	1240		1020			1270	1530	1260	1350	1420	1050	1250

07144780 NORTH FORK NINNESCAH RIVER ABOVE CHENEY RESERVOIR, KS--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

5	PECIFIC	CONDUCTA	IVCD (11IC	TOSTEPHEN)	CII AI 2.	DEG. C/	, WAIER IE	MC OCTOL	ДПС 2000	TO DELTER	DER ZOOI	
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	1260 1320 1270 1250 1260	1200 1260 1240 1230 1230	1240 1290 1260 1240 1250	934 991 1000 1050 1100	895 934 969 1000 1050	905 969 984 1030 1080	1150 1150 1140 1110	1130 1130 1110 1100 1100	1140 1140 1120 1110 1100	1190 1200 1170 1140 890	1160 1170 1120 683 710	1180 1190 1150 992 828
6 7 8 9 10	1260 1260 1240 1130 1220	1240 1240 1130 959 1100	1250 1250 1200 1040 1170	1120 1140 1180 1170 1170	1100 1120 1130 1160 1160	1110 1130 1160 1170 1170	1110 1120 1160 1160 1150	1090 1100 1120 1150 1100	1100 1110 1140 1150 1130	799 868 935 999 1040	696 735 846 931 997	730 808 889 957 1010
11 12 13 14 15	1270 1210 1180 1120 1100	1180 1150 1120 928 929	1240 1180 1160 1010 1030	1160 870 942 961 769	659 693 870 769 358	907 789 916 937 508	1100 1150 1160 1160 891	1060 1100 1140 865 595	1090 1130 1150 1120 746	1130 1150 1160 	1040 1120 1140 	1080 1130 1150 e1150 e1170
16 17 18 19 20	1250 1310 1290 1250 1210	1000 1000 1230 1200 1190	1180 1220 1250 1230 1200	559 592 693 831 954	367 558 592 693 831	456 569 643 760 867	931 1060 1090 1140 1140	686 931 1060 1090 1130	835 1010 1070 1110 1130	 	 	e1170 e1150 e1160 e1160 e1170
21 22 23 24 25	1230 1240 1220 918 807	1190 1220 918 600 635	1220 1230 1120 702 752	1020 1060 1090 1170 1170	954 1020 1060 1090 1160	988 1040 1080 1130 1170	1140 1130 1100 1050 1110	1120 1100 810 908 1050	1130 1130 935 976 1090	1170 1230 1180 1180	1170 1160 1160	e1160 e1160 1200 1170 1170
26 27 28 29 30 31	841 841 900 	805 769 781 	830 795 862 	1170 1170 1170 1120 1120 1140	1160 1160 1120 1100 1100 1120	1170 1170 1150 1110 1120 1130	1130 1160 1180 1160 1180	1110 1120 1120 1140 1130	1120 1130 1150 1150 1160	1180 1180 1090 1000 810 703	1140 1060 979 682 495 584	1170 1140 1050 916 635 662
MONTH	1320	600	1120	1180	358	978	1180	595	1090			1050
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN		MIN AUGUST	MEAN		MIN SEPTEMB	
	MAX 842 877 753 858 870		788 777 650 784 704	MAX 1230 1280 1270 1300 1320		MEAN 1170 1220 1220 1250 1290			MEAN 1150 1180 1170 1150 1140			
DAY 1 2 3 4	842 877 753 858	JUNE 685 534 533 751	788 777 650 784	1230 1280 1270 1300	JULY 1100 1140 1170 1180	1170 1220 1220 1250	1180 1200 1190 1160	AUGUST 1120 1170 1150 1140	1150 1180 1170 1150	991 1070 1080	929 987 1060	960 1030 1070 e1100
DAY 1 2 3 4 5 5 6 7 8 8 9 10 11 12	842 877 753 858 870 482 689 710 369 523	JUNE 685 534 533 751 268 329 465 205 212 369 523 635	788 777 650 784 704 389 593 483 304 460 572 695	1230 1280 1270 1300 1320 1340 1330 1290 1270 	JULY 1100 1140 1170 1180 1220 1260 1220 1240 1200 1180	1170 1220 1220 1250 1290 1310 1280 1260 1250 e1240	1180 1200 1190 1160 1160 1180 1160 1170 1160	AUGUST 1120 1170 1150 1140 1120 1140 1130 1140 1130 1140 1130	1150 1180 1170 1150 1140 1150 1160 1150 1140 1130 1110	991 1070 1080 1090 1080 1150 1160	929 987 1060 929 900 962 1050 1130 1120	960 1030 1070 el1080 1040 1020 11000 1140 1130
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14	842 877 753 858 870 482 689 710 369 523 635 748 867 985	JUNE 685 534 533 751 268 329 465 205 212 369 523 635 748 867	788 777 650 784 704 389 593 483 304 460 572 695 808 925	1230 1280 1270 1300 1320 1340 1330 1290 1270 1220 1190 1190	JULY 1100 1140 1170 1180 1220 1260 1220 1240 1200 1180 1130 1120	1170 1220 1220 1250 1290 1310 1280 1250 e1240 e1220 1200 1170 1160	1180 1200 1190 1160 1160 1160 1180 1170 1160 1150 1120 1130	1120 1170 1150 1140 1120 1140 1120 1140 1130 1140 1130 1140 1130 1110	1150 1180 1170 1150 1140 1150 1150 1150 1140 1130 1110 1110 1110	991 1070 1080 1090 1080 1150 1160 1160 1130 1090 1080 1060	929 987 1060 929 900 962 1050 1130 1120 1070 1070 1040 1030	960 1030 1070 el100 el080 1040 1100 1140 1130 1090 1080 1050 1040
DAY 1 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19	842 877 753 858 870 482 689 710 369 523 635 748 867 985 1100 1110 1170 1220	JUNE 685 534 533 751 268 329 465 205 212 369 523 635 748 867 985 1060 1030 1080 1010	788 777 650 784 704 389 593 483 304 460 572 695 808 925 1040 1100 1110 1150 1110	1230 1280 1270 1300 1320 1340 1330 1290 1270 1220 1190 1150	JULY 1100 1140 1170 1180 1220 1260 1220 1240 1200 1180 1130 1120 1020 1060 1110	1170 1220 1220 1250 1290 1310 1280 1250 e1240 e1220 1200 1170 1160 e1120 e1120	1180 1200 1190 1160 1160 1160 1180 1180 1170 1160 1170 1150 1120 1120 1130 1150 1160	1120 1170 1150 1140 1120 1140 1120 1140 1130 1140 1130 1140 1130 1140 1130 1100 110	1150 1180 1170 1150 1140 1150 1150 1150 1150 1110 111	991 1070 1080 1090 1080 1150 1160 1160 1130 1090 1080 1060 1050	929 987 1060 929 900 962 1050 1130 1120 1070 1070 1040 1030 923 944 728 122 343	960 1030 1070 el100 el080 1040 1100 1140 1130 1090 1080 1050 1040 971 960 931 456 579
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	842 877 753 858 870 482 689 710 369 523 635 748 867 985 1100 1110 1120 1200 1210	JUNE 685 534 533 751 268 329 465 205 212 369 523 635 748 867 985 1060 1030 1080 1010 1080 1010 1080 1010 1020 1040 1030	788 777 650 784 704 389 593 483 304 460 572 695 808 925 1040 1100 1150 1170 1150 1170 1100 11100 11100 11100	1230 1280 1270 1300 1320 1340 1330 1290 1270 1220 1190 1150 1100 1160 1160 1160 1160 1210 1210 1210	JULY 1100 1140 1170 1180 1220 1260 1220 1240 1200 1180 1130 1120 1120 1110 1120 1140 1120 1140 1120 1140 1120 1140 1120 1160 1070 1070 1070 1070 1080	1170 1220 1220 1250 1290 1310 1280 1250 e1240 e1220 1200 1170 1160 e1120 e1100 1060 1090 1130 1140 1150 1160 1170 1190 1110 1110 1110 1160	1180 1200 1190 1160 1160 1160 1180 1180 1170 1160 1120 1130 1150 1160 1110 1080 1040 1140 1160 1150 1140 1160 1150 1160 1110 1160 1170 1160 1170 1160 1170 1160 1170 117	1120 1170 1150 1140 1120 1140 1120 1140 1130 1140 1130 1140 1130 1060 937 1020 1040 1070 1140 1170 1070	1150 1180 1170 1150 1140 1150 1160 1150 1140 1130 1110 1110 1110 1130 1100 1080 1150 1150 1150 1150 1150 115	991 1070 1080 	929 987 1060 929 900 962 1050 1130 1120 1070 1070 1070 1070 1030 923 944 728 122 343 689 935 1050 11100	960 1030 1070 e1100 e1080 1040 1100 1140 1130 1090 1080 1050 971 960 931 456 579 829 1010 1080 1100
DAY 1 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	842 877 753 858 870 482 689 710 369 523 635 748 867 985 1100 1170 1220 1210 1140 1150 1140 1150 1150 1150 1160 1150 1160 1200	JUNE 685 534 533 751 268 329 465 205 212 369 523 635 748 867 985 1060 1030 1080 1010 1020 1040 1030 1070 1090 1080 1090 1090 1060 1020	788 777 650 784 704 389 593 483 304 460 572 695 808 925 1040 1100 1150 1170 1110 1150 1170 1110 111	1230 1280 1270 1300 1320 1340 1330 1290 1270 1220 1190 1150 1100 1160 1160 1160 1180 1210 1230 1230	JULY 1100 1140 1170 1180 1220 1260 1220 1240 1200 1180 1130 11120 1120 1130 1140 1120 1140 1120 1140 1120 1160 1170 1170 1170 1170 1170 1170 117	1170 1220 1220 1250 1290 1310 1280 1250 e1240 e1220 1200 1170 1160 e1120 e1100 1060 1090 1130 1140 1150 1160 1170 1190 1190 1110 1110 1110 1110	1180 1200 1190 1160 1160 1160 1180 1180 1170 1160 1170 1150 1120 1130 1150 1160 1110 1080 1140 1160 1160 1160 1160 1160 1160 1170 1160 116	1120 1170 1150 1140 1120 1140 1120 1140 1130 1140 1130 1140 1130 1100 110	1150 1180 1170 1150 1140 1150 1150 1150 1150 1110 111	991 1070 1080 1090 1080 1150 1160 1160 1130 1090 1080 1060 1050 977 1000 731 689 935 1060 1110 1130 1160 1160 1180 1190 1200	929 987 1060 929 900 962 1050 1130 1120 1070 1070 1040 1030 923 944 728 122 343 689 935 1050 1110 1130 1140 1140 1160 1180 1190 1160	960 1030 1070 el100 el080 1040 1100 1140 1130 1090 1080 1050 1040 971 960 931 456 579 829 1010 1080 1110 1140 1150

ARKANSAS RIVER BASIN

401 07144780 NORTH FORK NINNESCAH RIVER ABOVE CHENEY RESERVOIR, KS--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		OCTOBER			OVEMBER			DECEMBER			JANUAR	
				8.1 8.1 8.2 8.2 8.3	8.0 8.0 8.1 8.2 8.2	8.1 8.2 8.2 8.3	8.5 8.5 8.4 8.4	8.4 8.4 8.4 8.4	8.4 8.4 8.4 8.4	8.3 8.3 8.4 8.4	8.2 8.2 8.3 8.3	e8.3 8.3 8.3 8.3
6 7 8 9 10	8.9 8.9 8.8 8.8	8.3 8.4 8.4 8.4	8.5 8.6 e8.5 8.5	8.3 8.3 8.4 8.4	8.3 8.3 8.3 8.3	8.3 8.3 8.4 8.4	8.5 8.5 8.5 8.5	8.4 8.4 8.4 8.4	8.4 8.4 8.5 8.5	8.4 8.5 8.5 8.5 8.5	8.4 8.4 8.3 8.4	8.4 8.4 8.5 8.5
11 12 13 14 15	8.7 8.7 8.6 8.6 8.6	8.3 8.2 8.1 8.0 8.1	8.4 8.3 8.4 8.2 8.3	8.4 8.4 8.4 8.4	8.4 8.4 8.4 8.4	8.4 8.4 8.4 8.4	8.4 8.2 8.2 8.2	8.2 8.2 8.1 8.1	8.3 e8.2 8.2 8.2 8.1	8.5 8.5 8.4 8.4	8.5 8.3 8.4 8.4	8.5 8.4 8.4 8.4
16 17 18 19 20		8.0 8.1 8.1 8.1 8.1		8.4 8.4 8.4 	8.4 8.4 8.4 	8.4 8.4 8.4 e8.4 e8.4	8.2 8.2 8.2 8.2 8.3	8.2 8.2 8.2 8.2 8.2	8.2 8.2 8.2 8.2	8.4 8.4 8.4 8.4	8.4 8.4 8.4 8.3	8.4 8.4 8.4 8.4
21 22 23 24 25	8.5 8.4 8.5 8.2 7.9	8.1 8.2 8.2 7.6 7.5	8.3 8.3 8.3 7.9 7.8	8.3 8.4 8.4 8.4	8.3 8.3 8.4 8.4	e8.4 8.3 8.3 8.4 8.4	8.3 8.3 8.3 8.3	8.2 8.2 8.2 8.2 8.2	8.2 8.2 8.3 8.3	8.4 8.4 8.5 8.5	8.4 8.4 8.4 8.4	8.4 8.4 8.4 8.5
26 27 28 29 30 31	7.8 7.9 8.0 8.1 8.1	7.7 7.8 7.9 8.0 8.0								8.5 8.5 8.5 8.4 8.4		
MAX MIN	9.1 7.8	8.4 7.5	8.6 7.7			8.4 8.1			8.5 8.1			8.5 8.3
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		FEBRUARY			MARCH			APRIL			MAY	
		FEBRUARY	8.4 8.4 8.5 8.5	8.1 8.2 8.2 8.2 8.2	MARCH 8.1 8.1 8.1 8.2 8.2	8.1 8.1 8.2 8.2 8.2	8.4 8.4 8.5 8.4	8.4 8.3 8.3 8.3 8.3	8.4 8.4 8.4 8.4	8.6 8.7 8.6 8.5 8.2	MAY 8.4 8.3 8.1 8.0	8.5 8.5 8.5 8.3 8.1
1 2 3 4 5	8.5 8.5 8.5 8.5 8.5	FEBRUARY	8.4 8.4 8.5 8.5	8.1 8.2 8.2 8.2 8.2	MARCH 8.1 8.1 8.1 8.2 8.2	8.1 8.1 8.2 8.2 8.2	8.4 8.4 8.5 8.4	8.4 8.3 8.3 8.3 8.3	8.4 8.4 8.4 8.4		MAY 8.4 8.3 8.1 8.0	8.5 8.5 8.5 8.3 8.1
1 2 3 4 5 6 7 8 9	8.5 8.5 8.5 8.5 8.3 8.3 8.3	8.4 8.4 8.4 8.4 8.4 8.2	8.4 8.4 8.5 8.5 8.3 8.3 8.3 8.3	8.1 8.2 8.2 8.2 8.2 8.2 8.3 8.3	MARCH 8.1 8.1 8.2 8.2 8.2 8.2 8.2 8.2 8.2	8.1 8.1 8.2 8.2 8.2 8.2 8.2 8.3 8.3	8.4 8.5 8.4 8.4 8.4 8.4 8.4	8.4 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3	8.4 8.4 8.4 8.3 8.3 8.3 8.3	8.6 8.7 8.6 8.5 8.2	MAY 8.4 8.3 8.1 8.0 8.0 8.1 8.2 8.3 8.3	8.5 8.5 8.5 8.3 8.1 8.0 8.2 8.4 8.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14	8.5 8.5 8.5 8.5 8.3 8.3 8.3 8.2 8.1	### REBRUARY 8.4	8.4 8.5 8.5 8.3 8.3 8.3 8.2 8.1	8.1 8.2 8.2 8.2 8.2 8.3 8.3 8.3 8.3 8.3	MARCH 8.1 8.1 8.2 8.2 8.2 8.2 8.2 8.2 8.1 8.0	8.1 8.2 8.2 8.2 8.2 8.2 8.3 8.3 8.1 8.1	8.4 8.5 8.4 8.4 8.4 8.4 8.4 8.4 8.4	APRIL 8.4 8.3 8.3 8.3 8.3 8.2 8.2 8.3 8.3 8.3 8.2	8.4 8.4 8.4 8.3 8.3 8.3 8.3 8.3 8.3	8.6 8.7 8.5 8.2 8.1 8.4 8.6 8.6 8.7	MAY 8.4 8.3 8.1 8.0 8.0 8.1 8.2 8.3 8.3 8.4	8.5 8.5 8.3 8.1 8.0 8.2 8.4 8.5 8.5 8.5
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	8.5 8.5 8.5 8.5 8.3 8.3 8.2 8.1 8.2 8.2 8.2 8.2 8.2 8.2	8.4 8.4 8.4 8.2 8.3 8.3 8.3 8.1 8.1 8.1 8.2 8.2 8.2 8.2 8.2	8.4 8.5 8.5 8.3 8.3 8.3 8.2 8.1 8.1 8.2 8.2 8.2 8.2	8.1 8.2 8.2 8.2 8.2 8.3 8.3 8.3 8.3 8.1 8.2 8.2 8.1	MARCH 8.1 8.1 8.2 8.2 8.2 8.2 8.2 8.2 8.2 7.8 8.0 7.8 8.0 7.8 7.9 8.0 8.1 8.1	8.1 8.2 8.2 8.2 8.2 8.2 8.3 8.3 8.1 8.1 8.1 8.2 7.9	8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4	APRIL 8.4 8.3 8.3 8.3 8.2 8.2 8.3 8.3 8.2 7.7 7.9 8.1 8.2 8.2 8.2	8.4 8.4 8.4 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3	8.6 8.7 8.5 8.2 8.1 8.4 8.6 8.6 8.7 8.8 9	MAY 8.4 8.4 8.3 8.1 8.0 8.0 8.1 8.2 8.3 8.4 8.4	8.5 8.5 8.3 8.1 8.0 8.2 8.4 8.5 8.5 8.5 8.6
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	8.5 8.5 8.5 8.5 8.3 8.3 8.2 8.1 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.3	## REBRUARY 8.4	8.4 8.5 8.5 8.3 8.3 8.3 8.2 8.1 8.1 8.2 8.2 8.2 8.2 8.2 8.2 8.2 8.2	8.1 8.2 8.2 8.2 8.2 8.3 8.3 8.3 8.3 8.1 8.2 8.2 8.1 8.0 8.1 8.2 8.2	MARCH 8.1 8.1 8.2 8.2 8.2 8.2 8.2 8.2 7.8 8.0 7.8 7.9 8.0 7.8 7.9 8.1 8.1 8.1 8.2 8.2 8.2 8.3	8.1 8.2 8.2 8.2 8.2 8.2 8.3 8.3 8.1 8.1 8.2 7.9 7.9 8.0 8.1 8.2 8.2 8.2	8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4	APRIL 8.4 8.3 8.3 8.3 8.2 8.2 8.3 8.3 8.2 7.7 7.9 8.1 8.2 8.2 8.3 8.3 8.4 8.4 8.4 8.4 8.4 8.2 8.2	8.4 8.4 8.4 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3 8.3	8.6 8.7 8.5 8.2 8.1 8.4 8.6 8.6 8.7 8.8 8.9 	MAY 8.4 8.4 8.3 8.1 8.0 8.0 8.1 8.3 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4	8.5 8.5 8.3 8.1 8.0 8.2 8.4 8.5 8.5 8.5 8.6

07144780 NORTH FORK NINNESCAH RIVER ABOVE CHENEY RESERVOIR, KS--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			JULY			AUGUST			SEPTEMB	ER
1 2 3 4 5	8.3 8.4 8.3 8.4 8.3	8.1 8.0 8.0 8.2 7.7	8.2 8.2 8.1 8.2 8.3	8.8 8.8 8.7 8.7	7.8 7.8 7.9 7.9	8.4 8.4 8.5 8.4 8.2	8.7 8.7 8.8 8.8 8.7	7.8 7.8 7.8 7.9 7.9	8.2 8.4 8.4 8.2 8.2	8.6 8.5 8.6 9.1	7.6 7.6 7.5 7.6	8.0 8.0 7.9 e8.2 e8.4
6 7 8 9 10	7.9 8.1 8.0 7.7 7.8	7.7 7.8 7.5 7.5 7.7	7.8 7.9 7.8 7.5 7.7	8.7 8.7 8.7 8.7	7.9 7.9 7.9 7.9	8.4 8.4 8.4 8.4 e8.4	8.9 8.9 8.8 8.8	7.8 8.0 8.0 8.0	8.4 8.4 8.4 8.5	9.0 9.0 9.2 9.2	8.4 8.2 8.7 8.8	8.6 8.9 8.9 8.9
11 12 13 14 15	8.0 8.2 8.2 8.3 8.5	7.8 7.9 8.0 8.0	7.9 8.0 8.1 8.1	8.8 8.8 8.8 8.7	8.0 7.9 8.0 8.0	e8.4 8.4 8.5 e8.4	8.8 8.8 8.8 8.7	7.9 7.9	8.5 8.4 8.3 8.3	8.9 9.0 8.9 9.1		8.8 8.6 8.6 8.7
16 17 18 19 20	8.5 8.3 8.1 7.6 7.7	8.0 7.6 7.4 7.3 7.4	8.2 8.0 7.6 7.4 7.5	8.8 8.8 8.9 8.9	7.9 8.1 7.8 7.8	e8.4 8.4 8.5 8.5	8.7 8.8 8.8 8.8 8.8	7.7 7.8 7.8 7.9 7.9	8.2 8.2 8.4 8.3	9.1 9.0 8.7 8.3 8.4	8.4 8.0 7.9 8.0	8.7 8.7 8.1 8.2 8.2
21 22 23 24 25	8.0 8.2 8.4 8.4 8.5	7.6 8.0 8.1 8.1	7.7 8.0 8.1 8.2 8.3	9.0 9.0 9.0 8.9 8.6	8.0 8.1 8.1 8.2 7.9	8.6 8.7 8.6 8.5 8.4	8.7 8.6 8.6 8.7	7.9 7.9 7.9 7.8 7.7	8.3 8.2 8.2 8.1 8.2	8.7 8.8 9.1 9.2 9.2	8.2 8.4 8.7 8.9 9.1	8.6 8.6 8.9 9.1 9.2
26 27 28 29 30 31	8.6 8.8 8.7 8.8 8.7	8.1 8.2 7.9 7.9 7.9	8.4 8.5 8.5 8.4 8.4	8.5 8.6 8.5 8.6 8.6	7.6 7.7 7.8 7.7 7.8 7.8	8.0 8.2 8.1 8.2 8.2	8.6 8.5 8.6 8.5 8.5	7.7 7.7 7.7 7.6 7.7 7.5	8.1 8.0 7.9 8.1 7.9 7.9	9.4 9.3 9.4 9.4	9.2 8.9 9.3 9.3 9.2	9.3 9.3 9.4 9.3
MAX MIN	8.8 7.6	8.2 7.3	8.5 7.4			8.7 8.0	8.9 8.5	8.1 7.5	8.5 7.9			9.4 7.9
		TEMP	ERATURE,	WATER (DE	G. C), W	ATER YEAR	R OCTOBER	2000 TO	SEPTEMBER	R 2001		
DAY	MAX	TEMP MIN	ERATURE, MEAN	WATER (DE	G. C), W		R OCTOBER MAX	2000 TO MIN		R 2001 MAX	MIN	MEAN
DAY	MAX		MEAN	MAX		MEAN	MAX	MIN DECEMBER	MEAN		JANUAR'	
DAY 1 2 3 4 5	MAX 25.3 27.7 28.5 20.0 16.3	MIN	MEAN	MAX	MIN NOVEMBER 15.5 13.0 12.0	MEAN 17.2 14.7	5.0 3.8 4.3 6.0 4.4	MIN DECEMBER 2.0 1.91 .5 .9	MEAN 3.1 2.8 2.1 3.1 2.8		JANUAR	
1 2 3 4	25.3 27.7 28.5 20.0	MIN OCTOBE 13.8 14.3 16.0 14.3	MEAN R 18.6 20.1 21.6 16.5	MAX 18.3 16.3 14.0 15.0	MIN NOVEMBER 15.5 13.0 12.0 11.6	MEAN 17.2 14.7 12.8 13.2	5.0 3.8 4.3 6.0 4.4	MIN DECEMBER 2.0 1.91 .5 .9 2.3 2.1 3.5	MEAN 3.1 2.8 2.1 3.1 2.8 4.0 4.5 4.7	.0 .0 .1	JANUARY . 0 . 0 . 0 . 0 . 0 . 0 . 0	.0 .0 .0
1 2 3 4 5 6 7 8 9	25.3 27.7 28.5 20.0 16.3 12.1 17.5 16.8 16.2	MIN OCTOBE 13.8 14.3 16.0 14.3 10.6 7.2 6.4 4.4 3.7	MEAN R 18.6 20.1 21.6 16.5 14.9 9.4 11.0 9.7 9.2	MAX 18.3 16.3 14.0 15.0 15.2 14.8 9.5 8.1 8.8	MIN NOVEMBER 15.5 13.0 12.0 11.6 13.4 7.8 5.9 6.0 4.0	MEAN 17.2 14.7 12.8 13.2 14.3 10.8 7.7 7.1 6.3	5.0 3.8 4.3 6.0 4.4 6.1 6.7 5.8 6.1	MIN DECEMBER 2.0 1.91 .5 .9 2.3 2.1 3.5 1.8 .0	MEAN 3.1 2.8 2.1 3.1 2.8 4.0 4.5 4.7 3.8	.0 .0 .1 .2 .1 .2 .2	JANUAR: . 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0 . 0	.0 .0 .0 .0 .0 .0
1 2 3 4 5 6 7 8 9 10 11 12 13 14	25.3 27.7 28.5 20.0 16.3 12.1 17.5 16.8 16.2 15.3 18.9 21.6 19.7 23.1	MIN OCTOBE 13.8 14.3 16.0 14.3 10.6 7.2 6.4 4.4 4.7 6.5 10.3 13.8 15.4	MEAN R 18.6 20.1 21.6 16.5 14.9 9.4 11.0 9.7 9.2 9.4 12.0 15.3 16.8 18.1	MAX 18.3 16.3 14.0 15.0 15.2 14.8 9.5 8.1 8.8 8.5	MIN NOVEMBER 15.5 13.0 12.0 11.6 13.4 7.8 5.9 6.0 4.0 3.6 5.0 2.8 8.9	MEAN 17.2 14.7 12.8 13.2 14.3 10.8 7.7 7.1 6.3 6.1 5.6 4.8 3.1 e3.8	MAX 5.0 3.8 4.3 6.0 4.4 6.1 6.7 5.8 6.1 4.6 .4	MIN DECEMBER 2.0 1.91 .5 .9 2.3 2.1 3.5 1.8 .0 .0 .0 .0	MEAN 3.1 2.8 2.1 3.1 2.8 4.0 4.5 4.7 3.8 2.5	.0 .0 .1 .2 .1 .2 .2 .2 .8 4.7 5.0 7.6 7.2 5.9 5.7	JANUAR: .0 .0 .0 .0 .0 .0 .0 .0 .1 1.1 3.7 2.0 4.5 1.9	.0 .0 .0 .0 .0 .0 .1 .8 2.1 3.1 5.2 e4.9 5.2 3.8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	25.3 27.7 28.5 20.0 16.3 12.1 17.5 16.8 16.2 15.3 18.9 21.6 19.7 23.1 20.2 22.7 24.1 24.3 23.4	MIN OCTOBE 13.8 14.3 16.0 14.3 10.6 7.2 6.4 4.4 3.7 4.7 6.5 10.3 13.8 15.4 15.9 15.8 13.2 13.8 13.6	MEAN R 18.6 20.1 21.6 16.5 14.9 9.4 11.0 9.7 9.2 9.4 12.0 15.3 16.8 18.1 17.6 18.4 17.9	18.3 16.3 14.0 15.0 15.2 14.8 9.5 8.1 8.8 8.5 6.6 6.5 5.5 5.5 5.5	MIN NOVEMBER 15.5 13.0 12.0 11.6 13.4 7.8 5.9 6.0 4.0 3.6 5.0 2.8 .9 3.6 2.9 .5 1.6	17.2 14.7 12.8 13.2 14.3 10.8 7.7 7.1 6.3 6.1 5.6 4.8 8.3.1 e3.8 e6.0 4.5 3.2	5.0 3.8 4.3 6.0 4.4 6.1 6.7 5.8 6.1 4.6 .1 .1	MIN DECEMBER 2.0 1.91 .5 .9 2.3 2.1 3.5 1.8 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	MEAN 3.1 2.8 2.1 3.1 2.8 4.0 4.5 4.7 3.8 2.5 0 0.3 0 0 0 0 0 0 0	MAX .0 .0 .1 .2 .1 .2 .2 .8 4.7 5.0 7.6 7.2 5.9 5.7 5.0 2.9 2.8 2.3 4.0	JANUAR: .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .1 1.1 3.7 2.0 4.5 1.9 .4 1.0 .2 .1 .1	.0 .0 .0 .0 .0 .0 .1 3.1 5.2 e4.9 5.2 3.8 2.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 30	25.3 27.7 28.5 20.0 16.3 12.1 17.5 16.8 16.2 15.3 18.9 21.6 19.7 23.1 20.2 22.7 24.1 24.3 23.4 24.5 17.9 18.7 20.6 18.5 18.5 18.5 18.7 20.6 18.5 18.5 18.5 18.5 18.5 18.5 18.5 18.5	MIN OCTOBE 13.8 14.3 16.0 14.3 10.6 7.2 6.4 4.4 3.7 4.7 6.5 10.3 13.8 15.4 15.9 15.8 13.6 16.5 16.0 16.5 18.0 16.5 18.0 16.5 18.0 16.4	MEAN R 18.6 20.1 21.6 16.5 14.9 9.4 11.0 9.7 9.2 9.4 12.0 15.3 16.8 18.1 17.6 18.4 17.9 18.3 17.1 18.5 18.8 16.9 17.1 18.6 17.6 18.6 17.1 18.6 17.6 18.6	MAX 18.3 16.3 14.0 15.0 15.2 14.8 9.5 8.1 8.8 8.5 6.6 6.5 5.5 6.2 5.8 6.6 6.7 5.8 6.6 6.6 6.5 6.6 6.5 6.6 6.6 6.5 6.6 6.6	MIN NOVEMBER 15.5 13.0 12.0 11.6 13.4 7.8 5.9 6.0 4.0 3.6 6.0 2.8 8.9 3.6 2.9 5.5 1.6 6.0 2.9 3.2 4.3	MEAN 17.2 14.7 12.8 13.2 14.3 10.8 7.7 7.1 6.3 6.1 5.6 4.8 3.1 e3.8 e6.0 4.5 3.2 4.0 e4.5 4.5 4.7 5.4	MAX 5.0 3.8 4.3 6.0 4.4 6.1 6.7 5.8 6.1 4.6 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1	MIN DECEMBER 2.00 1.9911 .55 .99 2.33 2.11 3.55 1.88 .00 .00 .00 .00 .00 .00 .00 .00 .00	MEAN 3.1 2.8 2.1 3.1 2.8 4.0 4.5 4.7 3.8 2.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	MAX .0 .0 .0 .1 .2 .1 .2 .2 2.8 4.7 5.0 7.6 7.2 5.9 5.7 5.0 2.9 2.8 2.3 4.0 0 7.2 5.3 6.0 7.2 5.2 6.6 6.8 1.0 3.6 4.6	JANUAR: .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .1 1.1 3.7 2.0 4.5 1.9 .4 1.0 .211 .0 .0 .0 1.6 1.9 .1 2.4 .0 .0 .7 1.6	.0 .0 .0 .0 .0 .1 .8 2.1 3.1 5.2 e4.9 5.2 3.8 2.7 1.6 1.1 .9 .3 .0 .9 2.1 3.7 4.4 2.8 4.2 1.3 1.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	25.3 27.7 28.5 20.0 16.3 12.1 17.5 16.8 16.2 15.3 18.9 21.6 19.7 23.1 20.2 22.7 24.1 24.3 23.4 24.5 17.9 18.7 20.6 18.5 18.5 18.5 18.5 18.5 18.7 20.6 18.5 18.5 18.5 18.5 18.5 18.5 18.5 18.5	MIN OCTOBE 13.8 14.3 16.0 14.3 10.6 7.2 6.4 4.4 3.7 4.7 6.5 10.3 13.8 15.4 15.9 15.8 13.6 13.6 16.5 16.0 16.5 18.0 16.4	MEAN R 18.6 20.1 21.6 16.5 14.9 9.4 11.0 9.7 9.2 9.4 12.0 15.3 16.8 18.1 17.6 18.4 17.9 18.3 17.9 18.1 17.2 17.1 18.5 18.8 16.9	18.3 16.3 14.0 15.0 15.2 14.8 9.5 8.1 8.8 8.5 6.6 6.5 5.5 5.5 6.2 5.8 6.6 5.8 6.6 8.0 9.3 7.6	MIN NOVEMBER 15.5 13.0 12.0 11.6 13.4 7.8 5.9 6.0 4.0 3.6 5.0 2.8 .8 .9 3.6 2.9 3.6 2.9 3.2 4.3 3.0 4.7 3.3 3.0 2.4 4.7 3.3 3.0 2.4 3.0 4.7 3.3 3.2 1.1	MEAN 17.2 14.7 12.8 13.2 14.3 10.8 7.7 7.1 6.3 6.1 5.6 4.8 3.1 e3.8 e6.0 4.5 3.2 4.0 e4.5 4.5 4.7 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4 5.4	MAX 5.0 3.8 4.3 6.0 4.4 6.1 6.7 5.8 6.1 4.6 6.1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .	MIN DECEMBER 2.0 1.91 .55 .9 2.3 2.1 3.55 1.8 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	MEAN 3.1 2.8 2.1 3.1 2.8 4.0 4.5 4.7 3.8 2.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	MAX .0 .0 .1 .2 .1 .2 .2 .8 4.7 5.0 7.6 7.2 5.9 5.7 5.0 2.9 2.8 4.0 .3 2.8 5.3 6.0 7.2 5.2 6.6 2.8 1.0 3.6	JANUAR: .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .1 1.1 3.7 2.0 4.5 1.9 .4 1.0 .2 -11 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0 .0	.0 .0 .0 .0 .0 .0 .1 .8 2.1 3.1 5.2 e4.9 5.2 3.8 2.7 1.6 1.1 .9 .3 .0 .9 2.1 3.7 4.4 2.8 4.2 1.3 1.7

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07144780 NORTH FORK NINNESCAH RIVER ABOVE CHENEY RESERVOIR, KS--Continued TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		I EMP E.	icaronce,	WAIER (DE	3. C), W	AIDIC IDAIC	OCTOBER	2000 10	SEF LEMDER	2001		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	5.2 4.6 4.6 7.4 8.9	1.4 1 1.9 1.8 2.3	3.0 2.1 3.2 4.4 5.5	3.2 7.0 9.5 7.8 9.1	.1 1.7 3.8 4.7 4.7	1.4 4.1 6.5 6.5 6.6	15.7 13.6 17.4 14.7 20.2	9.0 11.6 13.5 12.6 13.7		27.4 24.6 21.5 19.8 23.1	17.9 17.6 17.9	21.5 21.1 19.7 18.7 19.7
6 7 8 9 10			6.4 7.1 6.2 .0				19.3 22.0 23.6 22.9 19.8			24.1 24.3 25.0 27.3 28.2	18.1 18.0 17.8 18.1 19.9	20.9 21.0 21.2 22.4 23.8
11 12 13 14 15	1.9 2.7 5.1 4.9 1.9	.0 .1 2.5 .1					18.8 19.1 21.6 18.8 18.3		16.2 13.5 16.4 16.2 15.6		20.7 18.2 19.6 20.2	23.8 23.1 24.3 24.1 24.2
16 17	2.8 3.8 3.6 9.2	1 .0 1 1.3	.9 1.4 1.7 4.9 6.1	7.2 9.5 8.4 9.8 13.5						29.9 27.9 25.1 24.5 24.5	22.6 22.8 20.9 21.8 21.7	26.0 24.9 22.7 23.4 23.1
21 22 23 24 25	5.3 6.6 5.2 7.7 7.0		2.5 3.1 4.0 5.6 5.8	15.1 16.2 16.8 12.3 9.6			26.1 21.9 18.4 21.0 24.4		21.0 19.0 14.3 16.5 18.9		18.0 16.2 14.3 13.5	19.0 19.4 16.9
26 27 28 29 30 31	7.0 6.1 .2 	4.4 .0 .0 	5.7 2.9 .1 	9.6 8.5 9.1 14.7 17.1 16.2	9.3	7.7 7.5 7.1 10.3 13.1 13.3	24.8 25.5 24.8 24.7 23.8			26.6 25.3 29.8 25.0 22.0 21.0	17.7 17.5 19.8 18.3	20.1 21.5 23.3 21.7 20.0 19.6
MONTH	10.3	1	3.3	17.1	.1	8.6	26.1	8.7	16.8		12.3	21.6
11011111												
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	MAX	MIN JUNE	MEAN	MAX	MIN JULY	MEAN		MIN AUGUST	MEAN		MIN SEPTEMBE	
	MAX 24.0 24.7 22.4 25.9 24.0		MEAN 20.9 21.6 20.7 21.5 21.4	32.4 33.2 33.8 36.0 31.1	JULY 24.0 24.0 23.7			AUGUST 23.4 24.4 25.2 23.5	28.8 29.8 30.0 28.8	33.4 33.1 33.1	20.2 20.3 21.8	
DAY 1 2 3 4 5	24.0 24.7 22.4 25.9	JUNE 17.9 18.6 19.6 18.4 19.4	20.9 21.6 20.7 21.5	32.4 33.2 33.8	JULY 24.0 24.0 23.7 24.3 25.6	28.0 28.3 28.6 30.0 28.1	35.5 36.4 37.0 35.3	AUGUST 23.4 24.4 25.2 23.5 24.1	28.8 29.8 30.0 28.8 29.7	33.4 33.1 33.1	20.2 20.3 21.8 21.8	25.8 26.1 26.5 24.8 23.7 21.4
DAY 1 2 3 4 5 6 7 8 9 10 11 12	24.0 24.7 22.4 25.9 24.0 24.5 28.6 26.4 26.2 28.6	JUNE 17.9 18.6 19.6 18.4 19.4 20.4 23.0 21.2 21.7 24.2 24.8 24.2	20.9 21.6 20.7 21.5 21.4 22.0 25.3 22.8 23.7 26.2	32.4 33.2 33.8 36.0 31.1	JULY 24.0 24.0 24.3 25.6 24.3 23.9 24.1 24.5 25.1	28.0 28.3 28.6 30.0 28.1 28.7 28.9 28.4 29.6 29.5	35.5 36.4 37.0 35.3 36.4 36.8 36.2 34.3 33.4 30.4	AUGUST 23.4 24.4 25.5 24.1 24.7 23.4 23.3 23.9 22.2 20.7 21.0	28.8 29.8 30.0 28.8 29.7 29.7 29.0 28.2 28.2 26.0	33.4 33.1 33.1 29.5 29.9 28.1 27.0 27.7 28.3 28.6 31.4	20.2 20.3 21.8 21.8 21.9 20.5 18.0 14.3 14.4	25.8 26.1 26.5 24.8 23.7 21.4 20.3 20.6
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14	24.0 24.7 22.4 25.9 24.0 24.5 28.0 26.2 28.6 29.5 29.6 29.3 27.1	JUNE 17.9 18.6 19.6 18.4 19.4 20.4 23.0 21.2 21.7 24.2 24.8 24.2 23.1 22.5	20.9 21.6 20.7 21.5 21.4 22.0 25.3 22.8 23.7 26.2 27.1 26.8 24.9	32.4 33.2 33.8 36.0 31.1 33.9 34.5 33.2 35.3 35.4 35.2 33.8 30.5 29.5	JULY 24.0 24.0 23.7 24.3 25.6 24.3 23.9 24.1 24.5 25.1 25.6 24.7 23.7	28.0 28.3 28.6 30.0 28.1 28.7 28.9 28.4 29.6 29.5 29.7 28.6 26.8 26.0	35.5 36.4 37.0 35.3 36.4 36.2 34.3 30.4 30.5 35.5 34.9 33.4	AUGUST 23.4 24.4 25.2 23.5 24.1 24.7 23.4 23.3 23.9 22.2 20.7 21.0 22.3 22.7 23.0 21.5	28.8 29.8 30.0 28.8 29.7 29.7 29.0 28.2 26.0 27.4 27.4 27.8 26.8	33.4 33.1 33.1 29.5 29.9 28.1 27.0 27.7 28.3 28.6 31.4 31.2 29.0	20.2 20.3 21.8 21.8 21.9 20.5 18.0 14.3 14.4 15.4 17.5 18.5	25.8 26.1 26.5 24.8 23.7 21.4 20.3 20.6 21.2 23.4 24.9 23.2
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	24.0 24.7 22.4 25.9 24.0 24.5 28.6 29.5 29.6 29.3 27.1 28.0 29.5 30.2 29.4	JUNE 17.9 18.6 19.6 18.4 19.4 20.4 23.0 21.2 21.7 24.2 24.8 24.2 23.1 22.5 20.2 20.4 21.4 20.6 21.5	20.9 21.6 20.7 21.5 21.4 22.0 25.3 22.8 23.7 26.2 27.1 26.8 24.9 24.1 24.7 25.6 25.6 25.6 25.3	32.4 33.2 33.8 36.0 31.1 33.9 34.5 33.2 35.3 35.4 35.2 33.8 30.5 29.5 	JULY 24.0 24.0 23.7 24.3 25.6 24.3 23.9 24.1 24.5 25.1 25.6 24.7 23.7 22.4 22.6	28.0 28.3 28.6 30.0 28.1 28.7 28.9 28.4 29.6 29.5 29.7 28.6 26.0 29.6 30.1 28.7	35.5 36.4 37.0 35.3 36.4 36.8 36.2 34.3 33.4 30.4 30.5 35.5 34.9 33.4 32.4 35.7 33.8 34.9 33.8	AUGUST 23.4 24.4 25.2 23.5 24.1 24.7 23.4 23.3 23.9 22.2 20.7 21.0 22.3 22.7 23.0 21.5 22.8 22.0 20.5	28.8 29.8 30.0 28.8 29.7 29.7 29.0 28.2 26.0 27.4 27.4 27.8 26.8 26.7	33.4 33.1 33.1 29.5 29.9 28.1 27.0 27.7 28.3 28.6 31.4 31.2 29.0 27.2	20.2 20.3 21.8 21.8 21.9 20.5 18.0 14.3 14.4 15.4 17.5 18.7 20.1 20.5 20.9 18.7	25.8 26.1 26.5 26.5 24.8 23.7 21.4 20.3 20.6 21.2 23.4 24.0 23.2 22.7 22.1 23.9 20.2
DAY 1 2 3 4 4 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	24.0 24.7 22.4 25.9 24.0 24.5 28.6 29.5 29.6 29.3 27.1 28.0 29.5 30.2 29.4 30.9 30.9 30.9 30.1 31.1	JUNE 17.9 18.6 19.6 18.4 19.4 20.4 23.0 21.7 24.2 24.8 24.2 23.1 22.5 20.2 20.4 21.4 20.6 21.5 21.0 21.4 20.6 22.3 22.4 21.0 21.6 22.3 23.4 21.0	20.9 21.6 20.7 21.5 21.4 22.0 25.3 22.8 23.7 26.2 27.1 26.8 26.2 24.9 24.1 24.7 25.6 25.0 25.3 24.5 24.9 25.6 26.6 25.7 25.6 26.6 26.6 26.6 26.6 26.7 27.7 27.7 27	32.4 33.2 33.8 36.0 31.1 33.9 34.5 35.3 35.4 35.2 33.8 30.5 29.5 34.6 34.5 35.2 33.1 35.1 35.2 33.1 35.1 35.2 33.1 35.2 33.1 35.2 34.5 35.3 36.0 37.2	JULY 24.0 24.0 23.7 24.3 25.6 24.3 23.9 24.1 24.5 25.1 25.6 24.7 23.7 22.4 22.6 25.7 25.7 25.4 23.9 25.0 25.5 24.8 25.5 24.9 24.1 23.8 24.7 24.8 26.0	28.0 28.3 28.6 30.0 28.1 28.7 28.9 29.6 29.5 29.7 28.6 26.0 29.6 30.1 29.1 29.5 29.3 30.0 27.5 29.3 28.4 429.6 30.1 29.5	35.5 36.4 37.0 35.3 36.4 36.2 34.3 30.4 30.5 35.5 34.9 33.4 32.4 35.7 33.8 34.1 33.0 31.8 30.5 34.0 32.1 33.0	AUGUST 23.4 24.4 25.2 23.5 24.1 24.7 23.4 23.3 23.9 22.2 20.7 21.0 22.3 22.7 23.0 21.5 22.8 22.0 20.5 20.5 20.9 21.3 21.6 22.5 20.9 21.3 21.6 22.5 22.1 23.2	28.8 29.8 30.0 28.8 29.7 29.7 29.0 28.2 26.0 27.4 27.4 27.5 25.8 26.7 27.8 27.4 27.5 25.8 26.2 25.2 27.1 27.5 27.8 27.4 27.5 27.8 27.4 27.5 27.8 27.8 27.1 27.1 27.1 27.1 27.1 27.1 27.1 27.1	33.4 33.1 33.1 29.5 29.9 28.1 27.0 27.7 28.3 28.6 31.4 31.2 29.0 27.2 25.3 29.6 21.0 24.7 26.4 27.6 28.5 24.1 22.4 22.7	20.2 20.3 21.8 21.8 21.9 20.5 18.0 14.3 14.4 15.4 17.5 18.7 20.1 20.5 20.9 18.7 20.1 20.5 20.9 18.7 20.1	25.8 26.1 26.5 24.8 23.7 21.4 20.3 20.6 21.2 23.4 24.0 23.2 22.7 22.1 23.9 20.2 21.2 23.3 24.4 23.9 19.6 17.7 17.5 18.1 19.2 20.1 20.1 20.1 20.1 20.1 20.1
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	24.0 24.7 22.4 25.9 24.0 24.5 28.6 29.5 29.3 27.1 28.0 29.5 30.2 29.5 30.9 30.9 30.9 30.9 30.1 31.1 30.7 31.2 32.3 29.4	JUNE 17.9 18.6 19.6 18.4 19.4 20.4 23.0 21.2 21.7 24.2 24.8 24.2 23.1 22.5 20.2 20.4 21.4 20.6 21.5 21.0 21.4 20.6 22.3 22.4 21.0	20.9 21.6 20.7 21.5 21.4 22.0 25.3 22.8 23.7 26.2 27.1 26.8 24.9 24.1 24.7 25.6 25.6 25.3 24.5 24.9 25.6 25.3 24.5 25.6 25.7	32.4 33.2 33.8 36.0 31.1 33.9 34.5 35.3 35.4 35.2 35.3 35.4 35.2 33.8 30.5 29.5 34.6 34.5 35.2 33.1 35.1 35.8 34.8 36.0 37.2	JULY 24.0 24.0 23.7 24.3 25.6 24.3 23.9 24.1 24.5 25.1 25.6 24.7 23.7 22.4 22.6 25.7 25.7 25.4 23.9 25.0 25.5 24.8 24.7 23.8 24.7 24.8	28.0 28.3 28.6 30.0 28.1 28.7 28.9 29.6 29.5 29.7 28.6 29.5 29.7 28.6 29.5 29.7 28.6 29.5 29.7 28.7 29.6 30.1 28.7 29.1 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5 29.5	35.5 36.4 37.0 35.3 36.4 36.8 36.2 33.4 30.5 35.5 34.9 33.4 32.4 35.7 33.8 34.1 32.1 33.0 31.8 30.5 34.1 32.1 32.1 33.0	AUGUST 23.4 24.4 25.2 23.5 24.1 24.7 23.4 23.3 23.9 22.2 20.7 21.0 22.3 22.7 23.0 21.5 22.8 22.0 20.5 20.9 21.3 21.6 22.1 23.2 22.9 21.0 20.7 22.3	28.8 29.8 30.0 28.8 29.7 29.7 29.0 28.2 26.0 27.4 27.8 26.8 26.7 27.8 27.4 27.5 25.8 26.2 25.9 25.2 27.1 27.8 26.2	33.4 33.1 33.1 29.5 29.9 28.1 27.0 27.7 28.3 28.6 31.4 31.2 29.0 27.2 25.3 29.6 21.0 24.7 26.4 27.6 28.5 24.1 22.4 22.7	SEPTEMBE 20.2 20.3 21.8 21.8 21.9 20.5 18.0 14.3 14.4 15.4 15.4 17.5 18.5 18.7 20.1 20.5 20.9 18.0 20.2 21.5 20.3 16.3 14.3 12.7 13.7 14.9 16.0 15.6	25.8 26.1 26.5 24.8 23.7 21.4 20.3 20.6 21.2 23.4 24.0 23.2 22.7 22.1 23.9 20.2 21.1 23.3 24.4 23.9 19.6 17.7 17.5 18.1 19.2 20.0

07144780 NORTH FORK NINNESCAH RIVER ABOVE CHENEY RESERVOIR, KS--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		OA.	IGEN DIS	SOLVED (MG	/L), WAI	EK IEAK	OCTOBER 200	00 10 SE	PIEMBER	2001		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER					I				JANUAR'	
1 2	10.6 10.9	7.1 6.6 6.3 7.0 7.5	8.7 8.6	8.1 8.9 9.6 9.7 9.2	7.7 8.1	7.8 8.6	14.6 14.7 15.6 15.3 15.3	12.6 13.9 13.8 13.2	13.9 14.2	16.2 16.2		e15.7
3 4	11.1	6.3 7.0	8.4	9.6 9.7	8.7	9.3	15.6 15.3	13.8	14.6	16.4 16.3		15.8
5 6												
7	12.1 12.3	9.5 9.3 9.3	10.5	11.9	8.8 10.9 11.2	11.3	14.7 14.6 14.3		e13.7	16.1 16.1	15.1 14.8	15.7 15.7 15.5
9 10	12.5 12.1	9.4 9.5	10.8 10.5 10.8 10.8	11.1 11.9 11.9 12.8 13.2	11.4 11.7	10.0 11.3 11.7 12.1 12.4	14.7 14.6 14.3 15.0 15.7	13.0 13.1	14.0 14.4	16.2 15.7	14.1 13.6	15.1 14.7
11										14 5	12.8	13.7
12 13	10.6 9.9	8.2 7.3 7.5	10.0 9.0 8.6 8.3 8.5	12.9 13.8 15.0 15.2 13.8	12.5 13.3	12.6 13.1 14.1 13.8 12.7	15.9 15.2 15.4 15.3	13.5	14.6	12.9 14.4 15.5	11.7 11.9	e13.0 12.5
14 15	9.8 10.0	7.2	8.3 8.5	15.2 13.8	12.7 11.8	13.8 12.7	15.4 15.3	13.4 14.8	14.8 15.0	14.4 15.5	12.5 13.8	13.6 14.5
16 17	10.0 10.1	7.8	8.7	14.0	12.3	13.5	15.9	14.8	15.4	15.8 16.3		15.3 16.0
18 19	10.1	7.8 7.8 7.6 7.8	8.7 8.9 8.8 8.8	14.0 15.6 15.1 	13.2	14.1	15.9 16.0 15.6 16.0 15.7	15.4	15.4 15.8 15.4 15.8 15.5	16.6 17.6	15.5	16.1 17.1
20	20.2					e13.4					16.8	17.2
21 22	9.5 9.5	7.9 8.1	8.6 8.7 8.5 7.7 7.2	13.5 13.3 13.2 13.5	12.4	e13.0 12.9	16.2 16.2 16.1 16.5 15.8	15.6 15.4	15.9 15.9 15.7 16.1 15.4	17.6 18.0	15.3	17.1 16.8
23 24	9.7 8.5 8.1	1.5	8.5 7.7	13.3 13.2	12.4 12.2	12.9 12.9 12.6 12.7	16.1 16.5	15.4 15.8	15.7 16.1	17.0 17.0	14.9	16.0
											15.5	16.6
26 27	7.1	6.3 7.1 7.7	6.8 7.5 7.8 8.2 8.4 8.0	13.8 13.7 13.1 13.9 14.4	11.9 11.9	12.8 12.7 12.3 13.0 13.3	15.2 16.0 16.2 16.2 16.4 16.0	14.4	14.6 15.2	16.7 18.4 18.0 17.5 16.6 16.6	15.4 16.2	17.6
28 29	8.0 8.4 8.8	7.7 7.8	8.2	13.1	11.7	12.3	16.2	15.2	15.6	18.0	17.5 16.0	17.8 16.8
30 31	8.8	8.1 7.6	8.4	14.4	12.4	13.3	16.4	15.7	15.8	16.6	15.5 15.2	16.1 15.9
MONTH	12.5	6.3	8.8			12.2						15.7
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
DAY		MIN FEBRUARY	ď		MARCH	MEAN		APRIL			MAY	MEAN
DAY 1 2		FEBRUAR!	ď		MARCH			APRIL			MAY	8.8
1		15.5 14.8	ď		MARCH			APRIL			MAY	8.8 8.8
1 2 3 4 5	16.7 17.1 	15.5 14.8 10.2	16.0 16.2 e15.0 e13.5 e12.0	13.0 12.5 11.8 11.7 12.0	MARCH 12.0 11.0 10.5 10.7 10.9	12.7 11.9 11.2 11.3 11.5	11.8 11.2 10.9 10.9 9.7	APRIL 10.0 10.0 9.6 8.7 7.6	10.9 10.6 10.2 9.9 8.8	9.8 9.7 10.5 9.8 8.6	MAY 7.7 7.6 7.6 8.1 7.3	8.8 8.8 9.1 8.7 8.1
1 2 3 4 5	16.7 17.1 11.5	15.5 14.8 10.2	16.0 16.2 e15.0 e13.5 e12.0	13.0 12.5 11.8 11.7 12.0	MARCH 12.0 11.0 10.5 10.7 10.9	12.7 11.9 11.2 11.3 11.5	11.8 11.2 10.9 10.9 9.7	APRIL 10.0 10.0 9.6 8.7 7.6	10.9 10.6 10.2 9.9 8.8	9.8 9.7 10.5 9.8 8.6	MAY 7.7 7.6 7.6 8.1 7.3	8.8 8.8 9.1 8.7 8.1
1 2 3 4 5 6 7 8 9	16.7 17.1 11.5 11.4 11.8 12.9	15.5 14.8 10.2	16.0 16.2 e15.0 e13.5 e12.0	13.0 12.5 11.8 11.7 12.0	MARCH 12.0 11.0 10.5 10.7 10.9	12.7 11.9 11.2 11.3 11.5	11.8 11.2 10.9 10.9 9.7	APRIL 10.0 10.0 9.6 8.7 7.6	10.9 10.6 10.2 9.9 8.8	9.8 9.7 10.5 9.8 8.6	MAY 7.7 7.6 7.6 8.1 7.3	8.8 8.8 9.1 8.7 8.1
1 2 3 4 5 6 7 8 9	16.7 17.1 11.5 11.4 11.8 12.9 13.0	15.5 14.8 10.2 10.3 9.6 9.6 11.8 12.4	16.0 16.2 e15.0 e13.5 e12.0	13.0 12.5 11.8 11.7 12.0 12.1 12.0 12.1 11.8 11.1	MARCH 12.0 11.0 10.5 10.7 10.9 10.7 10.9 10.5 10.0 9.9	12.7 11.9 11.2 11.3 11.5 11.4 11.5 11.3 10.9	11.8 11.2 10.9 10.9 9.7 8.8 9.5 9.1 8.9 8.8	APRIL 10.0 10.0 9.6 8.7 7.6 7.6 7.4 7.4 7.6	10.9 10.6 10.2 9.9 8.8 8.0 8.6 8.2 8.1 8.2	9.8 9.7 10.5 9.8 8.6 7.9 8.6 8.4 8.4	MAY 7.7 7.6 7.6 8.1 7.3 7.3 6.8 6.8 6.5 6.4	8.8 8.8 9.1 8.7 8.1 7.6 7.8 7.5 7.4
1 2 3 4 5 6 7 8 9 10	16.7 17.1 11.5 11.4 11.8 12.9 13.0	15.5 14.8 10.2 10.3 9.6 9.6 11.8 12.4	16.0 16.2 e15.0 e13.5 e12.0 10.8 10.6 10.6 12.5 12.8	13.0 12.5 11.8 11.7 12.0 12.1 12.0 12.1 11.8 11.1	MARCH 12.0 11.0 10.5 10.7 10.9 10.7 10.9 10.5 10.0 9.9	12.7 11.9 11.2 11.3 11.5 11.4 11.5 11.3 10.9 10.5	11.8 11.2 10.9 10.9 9.7 8.8 9.5 9.1 8.9 8.8	APRIL 10.0 10.0 9.6 8.7 7.6 7.6 7.6 7.4 7.4 7.6 7.8 8.3	10.9 10.6 10.2 9.9 8.8 8.0 8.6 8.2 8.1 8.2	9.8 9.7 10.5 9.8 8.6 7.9 8.6 8.4 8.4 8.6	7.7 7.6 7.6 8.1 7.3 7.3 6.8 6.8 6.5 6.4	8.8 8.8 9.1 8.7 8.1 7.6 7.8 7.5 7.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14	16.7 17.1 11.5 11.4 11.8 12.9 13.0 12.8 12.0 12.6	15.5 14.8 10.2 10.3 9.6 91.8 12.4 12.3 12.0 11.1	16.0 16.2 e15.0 e13.5 e12.0 10.8 10.6 12.5 12.8 12.7 12.5 11.6 11.7	13.0 12.5 11.8 11.7 12.0 12.1 12.1 11.8 11.1	MARCH 12.0 11.0 10.5 10.7 10.9 10.7 10.9 10.5 10.0 9.9 10.4 10.8 10.0 9.3	12.7 11.9 11.2 11.3 11.5 11.4 11.5 11.3 10.9 10.5	11.8 11.2 10.9 10.9 9.7 8.8 9.5 9.1 8.9 8.8 9.3 10.5 9.9	APRIL 10.0 10.0 9.6 8.7 7.6 7.6 7.7 7.4 7.4 7.6 8.3 7.8 8.3	10.9 10.6 10.2 9.9 8.8 8.0 8.6 8.2 8.1 8.2 8.5 9.5 8.9	9.8 9.7 10.5 9.8 8.6 7.9 8.6 8.4 8.4 8.6	MAY 7.7 7.6 7.6 8.1 7.3 7.3 6.8 6.8 6.5 6.4	8.8 8.8 9.1 8.7 8.1 7.6 7.8 7.5 7.4 7.5
1 2 3 4 5 6 7 8 9 10	16.7 17.1 11.5 11.4 11.8 12.9 13.0 12.8 12.0	FEBRUARY 15.5 14.8 10.2 10.3 9.6 9.6 11.8 12.4 12.3 12.0 11.1	16.0 16.2 e15.0 e13.5 e12.0 10.8 10.6 10.6 12.5 12.8	13.0 12.5 11.8 11.7 12.0 12.1 12.0 12.1 11.8 11.1	MARCH 12.0 11.0 10.5 10.7 10.9 10.7 10.9 10.5 10.0 9.9 10.4 10.8 10.0	12.7 11.9 11.2 11.3 11.5 11.4 11.5 11.3 10.9 10.5	11.8 11.2 10.9 10.9 9.7 8.8 9.5 9.1 8.9 8.8	APRIL 10.0 10.0 9.6 8.7 7.6 7.6 7.4 7.4 7.6 7.8 8.3 7.8	10.9 10.6 10.2 9.9 8.8 8.0 8.6 8.2 8.1 8.2 8.5 9.5 8.9	9.8 9.7 10.5 9.8 8.6 7.9 8.6 8.4 8.4 8.4 8.7 9.2	7.7 7.6 8.1 7.3 7.3 6.8 6.5 6.4 6.4 6.6	8.8 8.8 9.1 8.7 8.1 7.6 7.8 7.5 7.4 7.5 7.8 7.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	16.7 17.1 11.5 11.4 11.8 12.9 13.0 12.8 12.0 12.6 12.6 13.0	15.5 14.8 10.2 10.3 9.6 9.6 9.1.8 12.4 12.3 12.0 11.1 11.1 11.3 12.4 11.9 11.8	16.0 16.2 e15.0 e13.5 e12.0 10.8 10.6 10.6 12.5 12.8 12.7 12.5 11.6 11.7 12.7 12.5	13.0 12.5 11.8 11.7 12.0 12.1 12.0 12.1 11.8 11.9 11.9 11.6 10.9 11.4	MARCH 12.0 11.0 10.5 10.7 10.9 10.7 10.9 10.5 10.0 9.9 10.4 10.8 10.0 9.3 9.8 11.4 11.2 11.3	12.7 11.9 11.2 11.3 11.5 11.4 11.5 11.3 10.9 10.5 11.3 10.9 10.2 10.5	11.8 11.2 10.9 10.9 9.7 8.8 9.5 9.1 8.9 8.8 9.3 10.5 9.9 9.7 8.7	APRIL 10.0 10.0 9.6 8.7 7.6 7.6 7.7 7.4 7.4 7.6 7.8 8.3 7.8 8.0 7.5 7.7	10.9 10.6 10.2 9.9 8.8 8.0 8.6 8.2 8.1 8.2 8.5 9.5 8.9 8.8 8.1	9.8 9.7 10.5 9.8 8.6 7.9 8.6 8.4 8.4 8.4 8.6 9.2	7.7 7.6 7.6 8.1 7.3 7.3 6.8 6.5 6.4 6.6 6.0	8.8 8.8 9.1 8.7 8.1 7.6 7.8 7.6 7.5 7.4 7.5 7.8 7.9
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	16.7 17.1 11.5 11.4 11.8 12.9 13.0 12.8 12.6 12.8 13.0 12.4 11.7	15.5 14.8 10.2 10.3 9.6 11.8 12.4 12.3 12.0 11.1 11.1 12.3 12.4 11.9 11.9 11.9 11.9	16.0 16.2 e15.0 e13.5 e12.0 10.8 10.6 12.5 12.8 12.7 12.6 11.7 12.6 12.7 12.6 11.7 12.6	13.0 12.5 11.8 11.7 12.0 12.1 12.1 11.8 11.1 11.9 11.9 11.6 10.9 11.4 12.5 12.4 11.9	MARCH 12.0 11.0 10.5 10.7 10.9 10.7 10.9 10.5 10.0 9.9 10.4 10.8 10.0 9.3 9.8 11.4 11.2 11.3 11.2 10.3	12.7 11.9 11.2 11.3 11.5 11.4 11.5 11.3 10.9 10.5 11.3 11.3 10.9 10.2 10.5	11.8 11.2 10.9 10.9 9.7 8.8 9.5 9.1 8.9 8.8 9.3 10.5 9.9 9.7 8.7	APRIL 10.0 10.0 9.6 8.7 7.6 7.6 7.7 7.4 7.6 7.8 8.3 7.8 8.0 7.5 7.7 8.4 8.3 8.4 8.8 8.3	10.9 10.2 9.9 8.8 8.0 8.6 8.2 8.1 8.2 8.5 9.5 8.9 8.8 8.1 9.7 9.4 9.7	9.8 9.7 10.5 9.8 8.6 7.9 8.6 8.4 8.4 8.7 9.2 	MAY 7.7 7.6 8.1 7.3 6.8 6.5 6.4 6.6 6.0	8.8 8.8 9.1 8.7 8.1 7.6 7.8 7.5 7.4 7.5 7.8 7.9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	16.7 17.1 11.5 11.4 11.8 12.9 13.0 12.8 12.0 12.8 12.0 12.8 13.0 12.4 11.7	15.5 14.8 10.2 10.3 9.6 9.6 11.8 12.4 12.3 12.0 11.1 11.1 12.3 12.3 12.4 11.9 11.8 10.3 10.5	16.0 16.2 e15.0 e13.5 e12.0 10.8 10.6 10.6 12.5 12.8 12.7 12.5 11.6 11.7 12.7 12.5 11.4 11.0	13.0 12.5 11.8 11.7 12.0 12.1 12.0 12.1 11.8 11.1 11.9 11.6 10.9 11.4 12.5 12.4 11.9 12.9	MARCH 12.0 11.0 10.5 10.7 10.9 10.7 10.9 10.5 10.0 9.9 11.4 11.8 11.0 9.3 9.8 11.4 11.2 11.3 11.2 10.3	12.7 11.9 11.2 11.3 11.5 11.4 11.5 11.3 10.9 10.5 12.1 11.8 11.6 11.6 11.3	11.8 11.2 10.9 10.9 9.7 8.8 9.5 9.1 8.9 8.8 9.3 10.5 9.9 9.7 8.7 9.3 10.3 10.0 11.3 10.7	APRIL 10.0 10.0 9.6 8.7 7.6 7.6 7.7 7.4 7.6 7.8 8.3 7.8 8.0 7.5 7.7 8.4 8.3 8.4 8.8 8.3 8.3 8.3	10.9 10.6 10.2 9.9 8.8 8.0 8.6 8.2 8.1 8.2 8.5 8.9 8.8 8.9 9.5 8.9 9.6 9.7 9.6 9.6	9.8 9.7 10.5 9.8 8.6 7.9 8.6 8.4 8.4 8.4 8.7 9.2 	MAY 7.7 7.6 7.6 8.1 7.3 6.8 6.8 6.5 6.4 6.6 6.0 7.5	8.8 8.8 9.1 8.7 8.1 7.6 7.8 7.5 7.4 7.5 7.8 7.9
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07144780 NORTH FORK NINNESCAH RIVER ABOVE CHENEY RESERVOIR, KS--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY MAX MIN MEAN MAX MIN MEAN MAX MIN MEAN MAX MIN MEAN

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11 12 13 14 15	6.7 7.6 8.0 9.3 11.7	5.6 6.0 6.4 6.4 7.0	6.2 6.7 7.1 7.7 8.8	11.4 12.1 12.6 13.1	6.9 7.5 8.0	e9.0 9.3 9.8 10.5	9.4 9.6 9.9 9.5 9.9	5.6	7.3 7.5 7.9 7.7	9.7 9.3 9.1 8.9 9.1	7.3 6.8 6.7 6.4 6.6	8.6 8.3 8.1 7.8 7.6
16 17 18 19 20	13.7 14.4 14.8 15.8 14.6	6.9 6.8 6.9 6.8	9.3 10.0 10.2 10.6 9.7	12.8 13.4 13.2 12.2	6.6 6.2 5.9 5.2	9.3 9.4 8.9 8.6	10.8 11.4 11.0 10.7 10.6		7.8 8.3 8.6 8.7	9.4 8.5 8.2 	6.5 5.8 6.3 6.9	7.6 7.1 6.9
21 22 23 24 25	15.0 13.4 13.9 13.7 13.0	6.6 7.1 6.9 6.7 5.5	10.1 9.8 9.8 10.1 9.3	12.3 11.5 10.5 9.4 9.6	6.7 6.8 5.9 4.4 4.1	9.3 9.0 8.4 7.1 7.4	9.9 9.8 9.9 10.3 11.1	6.8 7.0 6.6 6.5 6.4	8.4 8.4 8.3 8.5 8.6	9.0 7.7 8.9 9.9 9.5	6.4 5.1 5.9 5.9 6.1	7.7 6.9 7.8 8.4 7.5
26 27 28 29 30 31	12.5 12.1 12.4	6.4 6.5 6.2	e9.1 e8.8 9.2 9.2 9.2	10.3 10.9 10.3 9.7 9.0 8.2	6.2 6.0 5.7 4.3 4.3 3.3	8.2 8.4 8.0 7.3 6.4 5.6	10.5 10.0 9.9 9.3 8.6 9.4	6.5 6.2 5.7 5.6 5.0 4.9	8.4 8.3 8.0 7.3 7.3 7.1	8.6 9.9 9.9 10.2 10.4	7.7	7.2 8.5 8.8 9.0 9.1
MONTH			8.2				11.4		7.5			
TURBIDI	ITY, FIEI	LD, WATER	R, UNFILT	ERED, NEPI	HELOMETR	IC TURBII	DITY UNITS,	WATER	YEAR OCTO	BER 2000 I	O SEPTEM	BER 20
DAY	MAX			343.37	24727		MAX	MITAT	MELTAN	MAX		
	1111121	MIN	MEAN	MAX	MIN	MEAN	MAA	MIN	MEAN	MAX	MIN	MEAN
	PIEZ	OCTOBER			MIN NOVEMBER	MEAN		MIN ECEMBER		MAX	JANUARY	
1 2 3 4 5	59 20 13 4.9					220 140 61 33 30				7.0 8.2 8.6 11	JANUARY 4.8 4.5	
2 3 4	59 20 13 4.9	OCTOBER 1.1 2.7 3.2 2.1 2.1 2.0 2.0 2.6 2.9	12 6.9 5.7 3.2	450 210 98 40	45 98 33 26	220 140 61 33	16 17 18 18	6.6 5.8 6.9 6.4	9.8 8.2 8.8 9.4	7.0 8.2 8.6 11	JANUARY 4.8 4.5 4.5 5.6	5.7 5.4 5.9 7.5
2 3 4 5 6 7 8 9	59 20 13 4.9 12 4.8 6.9 6.1 5.9	0CTOBER 1.1 2.7 3.2 2.1 2.1 2.0 2.0 2.6 2.9 2.3 1.2	12 6.9 5.7 3.2 4.4 3.1 4.0 4.1 3.9	450 210 98 40 43 38 33 32 23	45 98 33 26 25 18 17 14 9.3	220 140 61 33 30 27 23 20 16	16 17 18 18 11 13 9.1	6.6 5.8 6.9 6.4 7.2 7.6 	9.8 8.2 8.8 9.4 8.7 9.3 e8.6 e8.2 7.8	7.0 8.2 8.6 11 13 22 40 47 44	JANUARY 4.8 4.5 4.5 5.6 7.3 9.6 11 7.4 18	5.7 5.4 5.9 7.5 9.8 13 21 19 26
2 3 4 5 6 7 8 9 10 11 12 13 14	59 20 13 4.9 12 4.8 6.9 6.1 5.9 10 7.0 9.0 33 72	OCTOBER 1.1 2.7 3.2 2.1 2.1 2.0 2.0 2.6 2.9 2.3 1.2 2.0 3.9 6.7	12 6.9 5.7 3.2 4.4 3.1 4.0 4.1 3.9 4.3 3.2 4.8 12 22	450 210 98 40 43 38 33 22 23 21 23 24 30 29	45 98 33 26 25 18 17 14 9.3 12	220 140 61 33 30 27 23 20 16 16 18	16 17 18 18 11 13 9.1 12	6.6 5.8 6.9 6.4 7.2 7.6 5.9 5.5	9.8 8.2 8.8 9.4 8.7 9.3 e8.6 e8.2 7.8 7.6 6.8 e6.5 e7.5 e7.2	7.0 8.2 8.6 11 13 22 40 47 44 33 29 32 38 63	JANUARY 4.8 4.5 5.6 7.3 9.6 11 7.4 18 16 16 13 10 15	5.7 5.4 5.9 7.5 9.8 13 21 19 26 23 21 19 29
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	59 20 13 4.9 12 4.8 6.9 6.1 5.9 10 7.0 9.0 33 72 35 89 12 39 9.6	OCTOBER 1.1 2.7 3.2 2.1 2.1 2.0 2.0 2.6 2.9 2.3 1.2 2.0 3.9 6.7 6.3 6.8 4.7 4.0 3.9	12 6.9 5.7 3.2 4.4 3.1 4.0 4.1 3.9 4.3 3.2 4.8 12 16	450 210 98 40 43 38 33 22 23 21 23 24 30 29 	45 98 33 26 25 18 17 14 9.3 12	220 140 61 33 30 27 23 20 16 16 18 18 19 e16 e15 e14 e13 e12	16 17 18 18 11 13 9.1 12 9.1 8.2 12 12 13 8.1	6.6 5.8 6.9 6.4 7.2 7.6 5.9 5.5 4.8 5.5 5.7 5.9 5.5	9.8 8.2 8.8 9.4 8.7 9.3 e8.6 e8.2 7.6 6.8 e6.5 e7.2 6.8 8.0 7.6 7.6	7.0 8.2 8.6 11 13 22 40 47 44 33 29 32 38 63 33 25 17 22 28	JANUARY 4.8 4.5 5.6 7.3 9.6 11 18 16 16 13 10 15 11 9.3 8.3 7.8 7.4	5.7 5.4 5.9 7.5 9.8 13 21 19 26 23 21 19 23 18 16 12 14 13
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	59 20 13 4.9 12 4.8 6.9 6.1 5.9 10 7.0 9.0 33 72 35 89 12 39 9.6 19	OCTOBER 1.1 2.7 3.2 2.1 2.1 2.0 2.0 2.6 2.9 2.3 1.2 2.0 3.9 6.7 6.3 6.8 4.7 4.0 3.9 1.5	12 6.9 5.7 3.2 4.4 3.1 4.0 4.1 3.9 4.3 3.2 4.8 12 22 16 27 7.1 12 8.1 8.2 8.6 18 20 380	450 210 98 40 43 38 33 22 23 21 23 24 30 29 19 14 17	45 98 33 26 25 18 17 14 9.3 12 10 14 11 14 9 8 6.4	220 140 61 33 30 27 23 20 16 16 18 18 19 e16 e15 e14 e12 e11	9.1 9.1 12 9.1 8.2 12 13 8.1 14 7.6 9.6	6.6 5.8 6.9 6.4 7.2 7.6 5.9 5.5 4.8 5.5 5.7 5.9 5.5 5.7 5.9 5.5 5.7 5.9 6.4 4.8	9.8 8.2 8.8 9.4 8.7 9.3 e8.6 e8.2 7.6 6.8 e6.5 e7.2 6.8 8.0 7.6 8.0 7.6 8.0 7.6	7.0 8.2 8.6 11 13 22 40 47 44 33 29 32 38 63 33 25 17 22 28 20 35 46 35 24	JANUARY 4.8 4.5 5.6 7.3 9.6 11 18 16 16 13 10 15 11 9.3 8.3 7.4 7.6 8.2 9.9 11	5.7 5.4 5.9 7.5 9.8 13 21 19 26 23 21 19 23 18 16 12 14 13 11

07144780 NORTH FORK NINNESCAH RIVER ABOVE CHENEY RESERVOIR, KS--Continued

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 20

TURBIDITY,	FIELD,	WATER,	UNFILTERE	D, NEPH	ELOMETRIC	TURBIDITY	UNITS,	WATER	YEAR OCTOBER	2000 TO) SEPTEME	BER 20
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FE	BRUARY			MARCH			APRIL			MAY	
1 2 3 4 5	70 47 47 43 40	30 22 20 16 18	48 34 27 25 26	250 140 98 68 64	140 85 56 48 35	200 110 75 57 46	32 27 30 42 40	19 18 16 17 16	25 22 22 26 25	21 24 24 390 200	14 12 14 17 140	17 18 19 100 170
6 7 8 9 10	34 35 25 32 52	18 15 14 16 12	25 21 20 23 23	93 62 46 32 35	29 26 26 20 20	37 33 32 26 27	45 40 49 54 52	16 21 19 23 19	28 30 30 31 32	210 91 76 71	110 73 66 57	160 e110 83 71 65
11 12 13 14 15	69 76 64 100 90	14 32 30 55 36	33 48 45 83 55	1300 330 120 1300 1200	19 100 53 40 240	370 170 79 130 660	73 68 49 550 460	27 27 19 21 79	51 43 34 57 280	58 49 50 	47 40 38 	52 45 43 e42 e37
16 17 18 19 20	64 41 42 43 35	27 19 21 18 18	38 27 28 25 24	840 350 280 160 110	320 240 160 96 66	560 300 210 130 85	190 81 37	78 41 32	120 e58 e38 e36 34		 	e33 e31 e30 e28 e28
21 22 23 24 25	32 29 250 800 430	14 14 16 78 250	20 18 64 320 350	79 67 58 48 39	48 45 39 33 25	62 52 46 39 32	39 52 230 130 59	29 28 44 54 32	34 34 140 85 41	 64 59 53	 30 24 24	e37 e38 41 38 32
26 27 28 29 30 31	280 290 300 	130 160 210 	180 230 260 	44 43 42 34 38 34	25 20 23 20 21 21	31 30 29 28 29 27	38 40 38 26 28	22 21 18 16 11	34 29 25 21 19	45 160 140 330 410 220	24 25 35 110 190 120	32 44 71 220 280 170
MONTH	800	12	76	1300	19	120			49			70
11011111												
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		MIN JUNE	MEAN	MAX	MIN JULY	MEAN		MIN AUGUST	MEAN		MIN SEPTEMBER	
			MEAN 110 150 130 110 200	MAX 100 110 120 71 68		75 78 87 60 54			40 35 37 e35 e34			
DAY 1 2 3 4	130 240 200 110	JUNE 100 100 100 96	110 150 130 110	100 110 120 71	JULY 61 65 69 50	75 78 87 60	55 48 58	AUGUST 29 26 26	40 35 37 e35	86 67 	46 44 	e65 53 e50 e45
DAY 1 2 3 4 5 6 7 8 9	130 240 200 110 860 380 160 390 330	JUNE 100 100 100 96 96 160 93 89 130	110 150 130 110 200 250 110 220 200	100 110 120 71 68 75 69 72 72	JULY 61 65 69 50 42 39 43 40 31	75 78 87 60 54 53 52 50 e50	55 48 58 49 40 32	29 26 26 23 23 22	40 35 37 e35 e34 e32 31 29 27	86 67 110 160 110 100 98	46 44 42 37 61 63 41 41	e65 53 e50 e45 e50 92 83 e75 71
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14	130 240 240 200 110 860 380 160 330 130 110 89 83 78	JUNE 100 100 96 96 160 93 89 130 100 87 80 69 65	110 150 130 110 200 250 110 220 220 210 110 100 84 77 70	100 110 120 71 68 75 69 72 72 	JULY 61 65 69 50 42 39 43 40 31 31	75 78 87 60 54 53 52 50 e50 e49 e49 48 e50 e58	55 48 58 49 40 32 30 31 43 37 32	29 26 26 23 23 22 20 17 22 22 20	40 35 37 e35 e34 e32 31 29 27 24 24 30 29 26 26	86 67 110 160 110 100 98 82 59 54 61 30	46 44 44 37 61 63 41 41 45 28 26 23 19	e65 53 e50 e45 e50 92 83 e75 71 62 39 33 30 025
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	130 240 240 200 110 860 380 160 330 130 110 89 83 78 69 100 110 97 86	JUNE 100 100 100 96 96 160 93 89 130 100 87 80 69 65 60 66 67 73 65	110 150 130 110 200 250 110 220 220 210 110 100 84 77 70 64 76 81 82 75	100 110 120 71 68 75 69 72 72 92 210	JULY 61 65 69 50 42 39 43 40 31 31 60 110	75 78 87 60 54 53 52 50 e50 e49 e49 48 e50 e58 e60 e100 140 120 e110	55 48 58 	29 26 26 26 27 22 20 20 24 30 50 88	40 35 37 e35 e34 e32 31 29 27 24 24 30 29 26 26 26	866 677	46 44 44 37 61 63 41 41 45 28 26 23 19 22 46 50 580 460	8 e65 53 e50 e45 e50 92 83 e75 71 62 39 33 30 25 40 58 >360 >1300 >880
DAY 1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	130 240 240 200 110 860 380 160 330 130 110 89 83 78 69 100 110 97 86 78 120 93 60 56 71 66 71 66 71 73 120	JUNE 100 100 100 96 96 160 93 130 100 87 80 65 60 66 65 73 35 65 56 68 52 46 39 38 37 38 46 52 57	110 150 130 110 200 250 110 220 200 110 100 84 77 70 64 76 81 82 75 65 90 66 52 49 44 44 47 50 56 60 72	100 110 120 71 68 75 69 72 72 92 210 140 92 84 89 88 130	JULY 61 65 69 50 42 39 43 40 31 31 60 110 72 60 55 49 39 38 44 39 44 39	75 78 87 60 54 53 52 50 e50 e49 e49 48 e50 e49 48 e60 e110 e100 79 70 64 64 70 59 53 54 47	55 48 58 	29 26 26 26 27 22 20 20 20 24 30 50 38 33 30 26 23 28 44 39 35 18 22 21 6	40 35 37 e35 e34 e32 31 29 27 24 24 30 29 26 26 26 26 33 55 50 44 41 34 32 35 56 48 45 43 48 45 48 48 48 48 48 48 48 48 48 48 48 48 48	\$86 67 110 160 110 100 98 82 59 54 61 30 61 71 71 91700 1700 1700 1700 1700 1700 1	46 44 37 61 63 41 41 45 28 26 23 19 22 46 50 580 460 190 130 96 79 86 69 55 51 43 45	8 e65 53 e50 e45 e50 92 83 e75 71 62 39 33 30 25 40 >360 >1300 >880 e370 270 180 130 99 140 95 170 120
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	130 240 240 200 110 860 380 160 330 130 110 89 83 78 69 100 110 97 86 78 120 93 60 56 71 66 71 73	JUNE 100 100 100 100 96 96 160 93 89 130 100 87 80 65 66 65 66 65 56 68 52 46 39 38 37 38 46 52	110 150 130 110 200 250 110 220 200 110 100 84 77 70 64 76 81 82 75 65 90 66 52 49 44 47 50 55 60	100 110 120 71 68 75 69 72 72 72 92 210 140 92 84 89 98 130 72 65 82 67	JULY 61 65 69 50 42 39 43 40 31 31 60 110 72 60 55 49 39 38 44 39 44	75 78 87 60 54 53 52 50 e50 e49 e49 48 e50 e58 e60 e100 140 e110 e100 79 70 64 64 70 59 53 54 54	55 48 58 58 49 40 32 30 31 43 37 32 33 44 82 70 61 58 67 61 58 67	29 26 26 26 27 22 20 20 20 20 24 30 50 38 33 30 26 23 28 44 39 35 18 8 22	40 35 37 e35 e34 e32 31 29 27 24 24 30 29 26 26 26 33 55 56 50 44 41 34 32 35 56 48 45 43 28	\$86 67 110 160 110 100 98 82 59 54 61 30 61 71 71 21700 21700 21700 120 130 210 360 260 360	46 44 44 44 37 61 63 41 41 45 28 26 23 19 22 46 50 580 460 190 130 96 79 86 69 55 51 43	8 e655 53 e50 e45 e50 e45 e50 92 83 e75 71 62 39 33 300 25 40 >1300 >1300 e370 180 130 93 99 140 140 95 170

e Estimated

> Actual value is known to be greater than the value shown

07144790 CHENEY RESERVOIR NEAR CHENEY, KS

LOCATION.--Lat $37^{\circ}43'34"$, long $97^{\circ}47'38"$, in NW $^{1}/_{4}$ NE $^{1}/_{4}$ SE $^{1}/_{4}$ sec.6, T.27 S., R.4 W., Sedgwick County, Hydrologic Unit 11030014, in control house structure at outlet works of Cheney Dam on North Fork Ninnescah River, 6.0 mi north of Cheney, and at mile 15.9.

WATER-DISCHARGE RECORDS

DRAINAGE AREA. --901 mi², of which 237 mi² is probably noncontributing.

PERIOD OF RECORD. -- November 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Bureau of Reclamation).

1,418

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Nov. 17, 1964. Conservation pool elevation was first reached on Nov. 2, 1969. Total capacity, 566,300 acre-ft, consisting of the following: Dead storage, 979 acre-ft below elevation 1,378.5 ft; fish and wildlife storage, 14,310 acre-ft between elevations 1,378.5 ft and 1,392.9 ft; conservation pool, 151,800 acre-ft between elevations 1,392.9 ft and 1,421.6 ft; flood-control pool, 80,860 acre-ft between elevations 1,421.6 ft and 1,429.0 ft, crest of uncontrolled spillway; and uncontrolled storage, 318,300 acre-ft between elevations 1,429.0 ft and 1,447.8 ft. Reservoir is used for supplemental water supply for municipal and industrial uses in the city of Wichita, fish and wildlife conservation, flood control, and recreational purposes in Cheney Division Wichita project. Figures given herein represent total contents. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,429.40 ft June 11, 1995, contents, 252,980 acre-ft; minimum elevation since conservation pool was first reached, 1,412.33 ft Dec. 2-4, 1971, contents, 93,300 acre-ft.

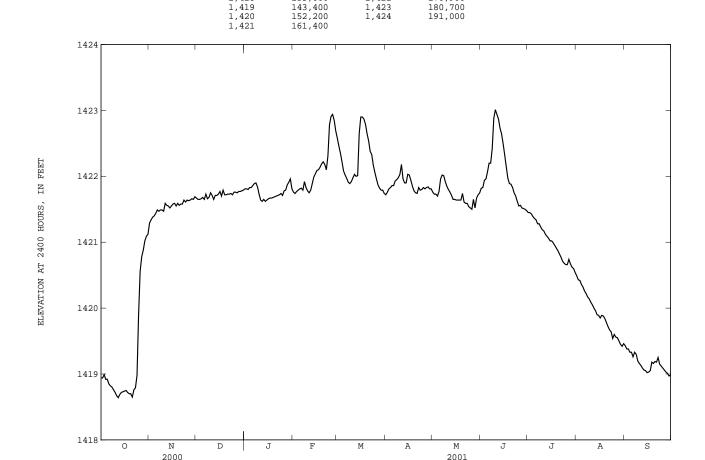
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,423.01 ft June 10, contents, 180,840 acre-ft; minimum elevation, 1,418.60 ft Oct. 13, contents, 140,040 acre-ft.

135,000

Capacity table (elevation, in feet, and contents, in acre-feet) (Based on survey by Bureau of Reclamation computed in 1965)

1,422

170,900



07144790 CHENEY RESERVOIR NEAR CHENEY, KS--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1418.99 1418.92	1421.29 1421.34 1421.38 1421.40 1421.44	1421.65 1421.66	1421.81 1421.80 1421.83	1421.76 1421.74 1421.77 1421.79 1421.81	1422.35 1422.22	1421.76	1421.73 1421.73 1421.70	1421.94	1421.45	1420.49 1420.43 1420.42 1420.36 1420.32	1419.43 1419.38 1419.38 1419.33
6 7 8 9 10	1418.80 1418.76	1421.49 1421.47 1421.49 1421.49	1421.66 1421.68	1421.90 1421.84	1421.79 1421.92 1421.83	1421.91 1421.89	1421.95 1421.98	1422.02 1422.01	1422.42 1422.88	1421.34 1421.28 1421.28 1421.23 1421.19	1420.26 1420.22 1420.17 1420.14 1420.09	1419.26 1419.33 1419.30 1419.20 1419.16
11 12 13 14 15	1418.69 1418.72	1421.55 1421.52	1421.65 1421.71 1421.71	1421.62 1421.65 1421.62	1421.75 1421.79 1421.89 1421.99 1422.04	1422.00 1422.01	1421.96 1421.90 1421.90	1421.71 1421.65	1422.73 1422.64	1421.09	1419.96 1419.90	1419.13 1419.09 1419.06 1419.05 1419.02
16 17 18 19 20	1418.75 1418.72 1418.70	1421.58 1421.59 1421.55 1421.59 1421.56	1421.79 1421.72	1421.67			1421.94 1421.85 1421.78	1421.64	1422.14 1421.97 1421.89	1421.02 1420.99 1420.95 1420.91 1420.87	1419.85 1419.89 1419.88 1419.84 1419.78	1419.03 1419.05 1419.18 1419.16 1419.19
21 22 23 24 25			1421.73 1421.74 1421.72	1421.72 1421.74	1422.31 1422.78	1422.38 1422.33	1421.79 1421.80	1421.61 1421.59 1421.59 1421.54 1421.52	1421.62	1420.82 1420.77 1420.71 1420.68 1420.66	1419.72 1419.67 1419.64 1419.54 1419.60	1419.18 1419.25 1419.15 1419.12 1419.09
26 27 28 29 30 31	1421.02	1421.63 1421.64 1421.66 1421.65 1421.69	1421.75 1421.77 1421.77 1421.78	1421.78 1421.79 1421.87 1421.91 1421.96 1421.81	1422.85 1422.69 		1421.83 1421.84 1421.81		1421.52 1421.51	1420.66 1420.74 1420.67 1420.62 1420.60 1420.54	1419.50 1419.45 1419.42	1419.06 1419.03 1419.01 1418.97 1418.98
MEAN MAX MIN (+) (#)	1418.64	1421.54 1421.69 1421.29 167,930 +5,420			1422.94	1422.21 1422.90 1421.74 168,400 -9,280		1421.71 1422.02 1421.50 168,500 -570	1422.07 1423.01 1421.48 165,930 -2,570	1421.00 1421.45 1420.54 157,160 -8,770	1419.90 1420.49 1419.42 147,470 -9,690	1419.16 1419.43 1418.97 143,250 -4,220

⁺ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

07144790 CHENEY RESERVOIR NEAR CHENEY, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. -- April 2001 to September 2001.

PERIOD OF DAILY RECORD. --

RIOD OF DAILY RECORD.—
SPECIFIC CONDUCTANCE: April 2001 to September 2001.
pH: April 2001 to September 2001.
WATER TEMPERATURE: April 2001 to September 2001.
DISSOLVED OXYGEN: April 2001 to September 2001.
TURBIDITY: April 2001 to September 2001.

 ${\tt INSTRUMENTATION.--Multiparameter\ water-quality\ monitor.}$

REMARKS.--Records fair. Interruptions in record are due to ice condtions or malfunction of the recording instrument or sensors. Instruments used to measure trubidity conform to ISO 7027 standards.

EXTREMES FOR CURRENT YEAR .--

INEMES FOR CURRENT YEAR.-
SPECIFIC CONDUCTANCE: Maximum, 814 microsiemens/cm, Sept. 30; minimum, 736 microsiemens/cm, June 15. pH: Maximum, 9.1 standard units, Apr. 9; minimum, 7.8 standard units, Sept. 18.

WATER TEMPERATURE: Maximum, 31.8°C, Aug. 6; minimum, 9.4°C, Apr. 4.

DISSOLVED OXYGEN: Maximum, 14.4 mg/L, Apr. 4; minimum, 2.6 mg/L, Aug. 13.

TURBIDITY: Maximum, 150 ntu, Apr. 11; minimum, 4.1 ntu, May 29.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	т	EBRUARY			MARCH			APRIL			MAY	
		EDRUARI			MARCH			APKIL			MAI	
1										789	781	786
2										790	786	788
3										791	788	789
4							772	761	768	789	785	788
5							769	764	767	792	788	790
							, 05	, 01	, , ,	.,,,	,00	,,,,
6							772	767	769	796	790	793
7							775	770	773	795	793	794
8							773	771	772	794	793	794
9							773	767	771	794	793	794
10							772	769	770	795	793	794
								, 05	,,,	.,,,	,,,,	,,,,
11							772	768	770	795	794	795
12							772	767	769	797	795	796
13							770	768	769	797	795	796
14							772	766	770	798	797	797
15							769	763	767	799	798	798
							, 05	, 05	, , ,		,,,,	,,,,
16							769	768	769	800	798	799
17							770	768	769	801	799	800
18							771	769	770	813	801	806
19							772	770	771	808	802	805
20							774	765	771	806	800	803
21							776	773	773	805	803	804
22							776	771	774	807	804	805
23							778	776	776	807	805	806
24							779	775	777	808	806	807
25							791	777	781	809	807	808
26							780	777	779	810	808	809
27							784	780	781	810	808	810
28							782	779	781	812	808	809
29							783	782	783	811	808	809
30							785	783	784	808	807	808
31										808	807	808
MONTH										813	781	800

07144790 CHENEY RESERVOIR NEAR CHENEY, KS--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY		i	AUGUST		S	SEPTEMBE	R
1 2 3 4 5	810 810 809 810 810	808 808 807 807 806	809 809 809 809 808	762 763 761 765	755 757 759 760	760 760 760 763 e762	788 789 789 790 790	785 780 785 787 787	787 787 788 789 789	801 801 802 802 802	798 799 798 799 799	799 800 800 801 801
6 7 8 9 10	807 808 805 805 805	803 800 794 793 801	805 805 799 800 804	 765 766 778	 763 762 762	e763 e764 764 764 766	794 793 793 793 792	787 788 787 789 789	791 791 790 790 791	802 803 804 804 805	800 800 802 803 803	801 802 803 803 804
11 12 13 14 15	804 803 799 791 764	801 798 783 737 736	802 800 790 781 747	770 765 779 762 768	757 758 740 759 762	765 763 760 761 766	793 801 799 797 798	787 784 789 791 790	791 792 795 794 794	806 806 808 808 808	804 805 805 806 806	805 806 806 807 807
16 17 18 19 20	769 769 769 767 766	762 763 761 757 760	765 768 765 762 764	769 769 770 771 773	762 768 769 770 771	766 769 769 770 772	802 801 793 794 796	791 775 785 790 793	795 787 789 793 795	808 810 809 810 806	806 808 800 804 804	807 809 805 806 805
21 22 23 24 25	763 763 761 761 761	760 752 752 760 759	761 757 759 760 760	774 775 775 783 788	772 773 774 775 782	773 774 774 778 784	796 797 797 797 798	793 792 793 796 797	795 795 796 797 797	806 806 807 806 806	805 806 805 805 803	805 806 806 806 805
26 27 28 29 30 31	761 762 761 760 762	759 759 758 759 760	760 761 759 760 761	783 784 784 785 785 786	781 782 782 783 783 783	782 782 783 783 784 784	798 801 799 799 800 799	797 798 796 797 795 794	798 799 798 798 799 796	806 807 807 810 814	804 806 806 807 808	805 806 807 808 810
MONTH	810	736	780			770	802	775	793	814	798	805

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	1	FEBRUAR	Y		MARCH			APRIL			MAY	
1										8.5	8.5	8.5
2										8.5	8.5	8.5
3										8.5	8.5	8.5
4							9.1	8.8	8.9	8.5	8.4	8.5
5							9.1	8.9	8.9	8.5	8.4	8.5
6							8.9	8.9	8.9	8.5	8.4	8.5
7							9.0	8.9	8.9	8.5	8.4	8.4
8							8.9	8.9	8.9	8.5	8.4	8.4
9							9.1	8.9	8.9	8.4	8.4	8.4
10							9.0	8.8	8.9	8.4	8.4	8.4
11							8.9	8.9	8.9	8.4	8.4	8.4
12							9.0	8.8	8.9	8.4	8.4	8.4
13							8.9	8.8	8.8	8.4	8.4	8.4
14							8.9	8.8	8.8	8.4	8.4	8.4
15							8.9	8.8	8.8	8.5	8.4	8.4
16							8.8	8.8	8.8	8.4	8.4	8.4
17							8.8	8.8	8.8	8.5	8.4	8.5
18							8.8	8.8	8.8	8.6	8.5	8.5
19							8.8	8.7	8.8	8.5	8.4	8.5
20							8.8	8.7	8.7	8.5	8.4	8.5
21							8.7	8.7	8.7	8.5	8.5	8.5
22							8.7	8.7	8.7	8.5	8.5	8.5
23							8.7	8.6	8.6	8.6	8.4	8.5
24							8.6	8.6	8.6	8.5	8.5	8.5
25							8.6	8.6	8.6	8.6	8.5	8.5
26							8.6	8.6	8.6	8.5	8.5	8.5
27							8.6	8.6	8.6	8.5	8.5	8.5
28							8.6	8.5	8.6	8.5	8.5	8.5
29							8.5	8.5	8.5	8.5	8.4	8.5
30							8.5	8.5	8.5	8.5	8.4	8.5
31										8.6	8.5	8.5
MAX										8.6	8.5	8.5
MIN										8.4	8.4	8.4

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

07144790 CHENEY RESERVOIR NEAR CHENEY, KS--Continued

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		JUNE			JULY			AUGUST			SEPTEMBI	ER
1 2 3 4 5	8.6 8.5 8.5 8.6 8.5	8.5 8.5 8.4 8.5 8.5	8.5 8.5 8.5 8.5	8.9 8.8 8.7 8.8	8.5 8.5 8.6 8.6	8.6 8.7 8.7 8.8 e8.6	8.5 8.6 8.5 8.5	8.4 8.3 8.2 8.3 8.2	8.4 8.4 8.4 8.4	8.4 8.3 8.5 8.5	8.2 8.1 8.1 8.1 8.0	8.2 8.2 8.2 8.2 8.2
6 7 8 9 10	8.6 8.8 8.9 8.8 8.6	8.5 8.5 8.6 8.5 8.5	8.5 8.6 8.8 8.6 8.6	8.6 8.6 8.6 8.6	 8.4 8.5 8.2	e8.6 e8.5 8.5 8.5	8.5 8.6 8.5 8.5	8.0 8.2 8.3 8.0	8.2 8.3 8.4 8.4 8.1	8.1 8.2 8.4 8.4		8.0 8.2 8.2 8.3 8.3
11 12 13 14 15	8.7 8.6 8.6 8.8 8.8	8.5 8.5 8.4 8.5 8.5	8.6 8.5 8.5 8.7 8.6	8.5 8.6 8.6 8.4	8.2 8.3 8.4 8.4 7.8	8.4 8.4 8.6 8.5 8.2	8.5 8.5 8.2 8.1 8.2	8.0 7.9 7.8 7.9 8.0	8.2 8.2 8.0 8.0	8.3 8.2 8.2 8.2 8.2	8.1 8.1 8.0 8.0	8.2 8.2 8.1 8.0 8.0
16 17 18 19 20	8.6 8.5 8.5 8.6 8.6	8.5 8.4 8.4 8.4	8.5 8.5 8.4 8.5 8.5	8.4 8.5 8.5 8.4	8.0 8.4 8.4 8.3	8.4 8.4 8.4 8.4	8.4 8.4 8.5 8.2		8.1 8.0 8.2 8.2 8.0	8.1 8.0 8.1 8.3	8.0 7.8 7.8 8.0 8.2	8.0 7.9 7.9 8.2 8.3
21 22 23 24 25	8.7 8.8 8.7 8.6 8.6	8.4 8.4 8.4 8.5	8.5 8.6 8.5 8.5	8.4 8.4 8.5 8.6	8.4 8.3 8.3 8.3	8.4 8.4 8.3 8.4 8.6	8.2 8.3 8.3 8.3	8.1 8.2 8.2 8.2 8.2	8.2 8.2 8.2 8.2	8.3 8.3 8.5 8.5	8.2 8.2 8.3 8.4	8.3 8.3 8.4 8.5 8.5
26 27 28 29 30 31	8.6 8.5 8.6 8.7	8.4 8.5 8.5 8.5	8.5 8.5 8.5 8.5		8.4 8.5 8.4 8.4	8.6 8.5 8.5 8.5 8.5	8.3 8.4 8.5 8.3 8.0		8.2 8.2 8.2 7.9 7.9	8.5 8.5 8.6 8.6	8.4 8.4 8.5 8.5 8.5	8.4 8.5 8.5 8.5 8.5
MAX MIN	8.9 8.5	8.6 8.4	8.8 8.4			8.8 8.2	8.6 8.0	8.4 7.8	8.4 7.9	8.6 8.0	8.5 7.8	8.5 7.9
		TEMP	ERATURE,	WATER (DE	G. C), W	ATER YEA	R OCTOBER	2000 TO	SEPTEMBER	2001		
DAY	MAX	TEMP MIN	ERATURE, MEAN	WATER (DE	G. C), W	ATER YEAI MEAN	R OCTOBER	2000 TO MIN	SEPTEMBEF MEAN	2001 MAX	MIN	MEAN
DAY			MEAN								MIN MAY	MEAN
DAY 1 2 3 4 5		MIN	MEAN		MIN			MIN				MEAN 17.2 17.7 18.1 17.7 18.3
1 2 3 4	 	MIN FEBRUAR 	MEAN Y	MAX	MIN MARCH	MEAN	MAX 11.7	MIN APRIL 9.4	MEAN 10.4	MAX 17.5 18.2 19.5 17.9	MAY 16.9 17.4 17.7 17.5	17.2 17.7 18.1 17.7
1 2 3 4 5 6 7 8 9		MIN FEBRUAR	MEAN Y	MAX	MIN MARCH	MEAN	MAX 11.7 11.8 11.2 14.9 12.8 16.3	MIN APRIL 9.4 10.2 10.7 11.1 11.5 12.5	MEAN 10.4 11.0 10.9 11.8 12.1 13.4	MAX 17.5 18.2 19.5 17.9 19.0 21.6 21.0 19.7	MAY 16.9 17.4 17.7 17.5 17.5 18.4 19.1 18.8 19.0	17.2 17.7 18.1 17.7 18.3 19.8 20.0 19.2 19.3
1 2 3 4 5 6 7 8 9 10 11 12 12 13 14		MIN FEBRUAR	MEAN Y	MAX	MIN MARCH	MEAN	MAX 11.7 11.8 11.2 14.9 12.8 16.3 15.2 14.0 16.5 14.7	MIN APRIL 9.4 10.2 10.7 11.1 11.5 12.5 12.7 13.2 13.8 13.7 13.9	MEAN 10.4 11.0 10.9 11.8 12.1 13.4 13.7 13.7	MAX 17.5 18.2 19.5 17.9 19.0 21.6 21.0 19.7 19.7 20.0 20.4 20.5 21.1 21.2	MAY 16.9 17.4 17.7 17.5 17.5 18.4 19.1 18.8 19.0 19.3 19.7 19.7 19.9 20.5	17.2 17.7 18.1 17.7 18.3 19.8 20.0 19.2 19.3 19.6 19.9 20.2 20.5 20.9
1 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19		MIN FEBRUAR	MEAN Y	MAX	MIN MARCH	MEAN	MAX11.7 11.8 11.2 14.9 12.8 16.3 15.2 14.0 16.5 14.7 14.6 16.6	MIN APRIL 9.4 10.2 10.7 11.1 11.5 12.5 12.7 13.2 13.8 13.7 13.9 14.1 13.8 13.4 13.6 13.6	MEAN 10.4 11.0 10.9 11.8 12.1 13.4 13.7 14.8 14.3 14.2 14.8 14.5 13.9 13.7 13.8	17.5 18.2 19.5 17.9 19.0 21.6 21.0 19.7 20.0 20.4 20.5 21.1 21.2 21.8 22.0 23.0 23.0	MAY 16.9 17.4 17.7 17.5 17.5 18.4 19.1 18.8 19.0 19.3 19.7 19.7 19.9 20.5 20.9 21.2 21.6 22.3 22.2	17.2 17.7 18.1 17.7 18.3 19.8 20.0 19.2 19.3 19.6 19.9 20.5 20.9 21.3 21.4 22.2 23.3 22.7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 27 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20		MIN FEBRUAR	MEAN Y	MAX	MIN MARCH	MEAN	MAX 11.7 11.8 11.2 14.9 12.8 16.3 15.2 14.0 16.5 14.7 14.6 16.6 14.9 14.4 13.9 14.0 14.7 15.4 15.9 16.4 20.0 16.6 16.4 16.6	MIN APRIL 9.4 10.2 10.7 11.1 11.5 12.5 12.7 13.2 13.8 13.7 13.9 14.1 13.8 13.4 13.6 13.6 14.0 14.6 14.9 14.8 15.2 15.6	MEAN 10.4 11.0 10.9 11.8 12.1 13.4 13.7 14.8 14.3 14.2 14.8 14.5 13.9 13.7 13.8 14.3 14.2 14.8 15.4 15.7 17.0 15.8 16.2 16.4 16.5	MAX 17.5 18.2 19.5 17.9 19.0 21.6 21.0 19.7 20.0 20.4 20.5 21.1 21.2 21.8 22.0 23.0 26.4 23.3 22.9 22.8 20.9 21.0 20.6 20.6 20.6 20.6	MAY 16.9 17.4 17.7 17.5 17.5 18.4 19.1 18.8 19.0 19.3 19.7 19.7 19.9 20.5 20.9 21.2 21.6 22.3 22.2 22.4 20.9 20.3 19.4 18.7 19.4 19.8 19.7 18.9	17.2 17.7 18.1 17.7 18.3 19.8 20.0 19.2 19.3 19.6 19.9 20.5 20.9 21.3 21.4 22.2 23.3 22.7 22.7 21.5 20.6 19.7 19.4
1 2 3 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28		MIN FEBRUAR	MEAN Y	MAX	MIN MARCH	MEAN	MAX 11.7 11.8 11.2 14.9 12.8 16.3 15.2 14.0 16.5 14.7 14.6 16.6 14.9 14.4 13.9 14.0 14.7 15.4 15.9 16.4 20.0 16.6 16.4 20.0	MIN APRIL 9.4 10.2 10.7 11.1 11.5 12.7 13.2 13.8 13.7 13.9 14.1 13.8 13.6 14.0 14.6 14.9 14.8 15.2 15.6 15.2 16.0 16.2	MEAN 10.4 11.0 10.9 11.8 12.1 13.4 13.7 14.8 14.3 14.2 14.8 14.5 13.9 13.7 13.8 14.3 14.5 15.4 15.7 17.0	MAX 17.5 18.2 19.5 17.9 19.0 21.6 21.0 19.7 19.7 20.0 20.4 20.5 21.1 21.2 21.8 22.0 23.0 26.4 23.3 22.9 21.2 20.3 20.0 21.0 20.6 22.6	MAY 16.9 17.4 17.7 17.5 17.5 18.4 19.1 18.8 19.0 19.3 19.7 19.7 19.9 20.5 20.9 21.2 21.6 22.3 22.2 22.4 20.9 20.3 20.1 19.4 18.7	17.2 17.7 18.1 17.7 18.3 19.8 20.0 19.2 19.3 19.6 19.9 20.2 20.5 20.5 20.9 21.3 21.4 22.2 23.3 22.7 22.7 21.5 20.6 19.7 19.4

MONTH

07144790 CHENEY RESERVOIR NEAR CHENEY, KS--Continued

		TEMPE	RATURE,	WATER (DEG.	. C), W	ATER YEAR	OCTOBER	2000 TO	SEPTEMBER	2001		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBE	IR.
1 2 3 4 5	20.5 20.8 19.5 20.5 20.3	19.4 19.2	19.9 19.8 19.3 19.8 20.1	26.3 26.5	24.6 25.4	25.3 25.4 25.9 27.9	29.4 29.6 29.2 29.4	27.5 27.7 27.3 28.0 27.9	27.9 28.3 28.3 28.6 28.7	27.9 26.5 27.3 27.8 26.0	25.4 25.4 25.5 25.5 25.4	26.1 25.8 26.3 26.2 25.7
6 7 8 9 10	20.6 25.2 25.1 22.4 22.2	20.3 22.0 21.0	20.3 22.3 23.7 21.8 21.5		26.5 26.9 25.9	26.9 27.2 27.1	31.8 31.3 29.8 29.1 28.3	27.2 27.2 28.0 28.2 27.2	28.5 28.8 28.7 28.4 27.6	25.6 25.6 25.1 24.8 24.3		25.4 25.3 24.7 24.0 24.0
11 12 13 14 15	22.9 22.5 23.3 24.4 24.5	22.1 22.2 22.9	22.4 22.4 22.9 23.6 24.1	29.2 28.4 27.5	26.9 26.6	26.5 27.6 27.8 27.2 26.3	28.5 30.3 29.5 27.5 27.7	26.9 27.1 26.9 26.9 26.8		23.9 24.0 23.4 23.2 23.4		23.5 23.1 22.8 22.5 22.5
16 17 18 19 20	24.2 24.1 24.1 24.8 24.4	23.5 23.6 23.7	23.9 23.8 23.9 24.1 24.0	27.5 28.0 27.7	26.6 27.0	26.6 27.1 27.5 27.5 27.5	30.7 27.9 28.8 27.0 26.8	26.8 26.7 26.5 26.3 26.1	26.8	22.7 22.8 22.5 25.2 23.3	22.3 22.3 22.1 22.0 22.5	22.4 22.5 22.3 23.2 22.8
21 22 23 24 25	24.9 27.2 24.9 24.6 24.6	23.9 23.8	24.2 24.8 24.3 24.4 24.3	28.3 28.2 28.4	27.2 27.5 27.4 27.4 27.3	27.7 27.8 27.7 27.8 27.8	26.6 26.3 26.5 26.3 27.4			22.7 22.8 22.6 21.5 21.6	22.2 22.1 21.5 20.9 20.6	22.5 22.4 22.1 21.3 20.9
26 27 28 29 30 31	24.9 24.7 25.8 25.5 25.6	23.9 24.2	24.3 24.2 24.6 24.7 24.9	27.9 28.8 28.7 28.2	27.0 27.2 27.1	27.2 27.4 27.7 27.6 27.6 27.7	27.1 29.4 28.0 26.8 26.6 26.8	25.9 25.9 25.9 26.0 26.0	26.3 26.2	21.0 20.9 20.0 20.4 23.2		20.6 20.2 19.8 19.7 20.4
MONTH	27.2	19.2	22.9				31.8	25.4	27.3	27.9	19.3	23.0
11011111												
PIOIVIII		OXY	GEN DIS	SOLVED (MG/I	L), WATE	ER YEAR OO	CTOBER 20	00 TO SE	PTEMBER 2	001		
DAY	MAX	OXY	GEN DIS	SOLVED (MG/I	L), WATE	ER YEAR OO	CTOBER 20	00 TO SE	PTEMBER 2	001 MAX	MIN	MEAN
			MEAN	MAX							MIN MAY	MEAN
DAY 1		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN	MAX 8.3	MAY 8.1	8.2
DAY		MIN FEBRUARY	MEAN	MAX	MIN	MEAN	MAX	MIN APRIL	MEAN	MAX	MAY	
DAY 1 2		MIN FEBRUARY 	MEAN	MAX	MIN MARCH	MEAN 	MAX	MIN APRIL	MEAN 	MAX 8.3 8.1	MAY 8.1 7.9	8.2 8.1
DAY 1 2 3 4	 	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14.4	MIN APRIL 10.8	MEAN 12.1	MAX 8.3 8.1 8.3 7.9	MAY 8.1 7.9 7.8 7.6	8.2 8.1 8.1 7.8
DAY 1 2 3 4 5 6 7		MIN FEBRUARY 	MEAN	MAX	MIN MARCH	MEAN	MAX14.4 13.7 11.4 12.1	MIN APRIL 10.8 11.1 10.7 10.5	MEAN 12.1 12.1 11.2	MAX 8.3 8.1 8.3 7.9 7.9	MAY 8.1 7.9 7.8 7.6 7.5 7.7	8.2 8.1 8.1 7.8 7.8 7.9
DAY 1 2 3 4 5 6 7 8 9		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14.4 13.7 11.4 12.1 11.2	MIN APRIL 10.8 11.1 10.7 10.5 10.6 10.2	MEAN 12.1 12.1 11.2 11.0 10.8 11.0	MAX 8.3 8.1 8.3 7.9 7.9 8.1 8.1 8.0 7.8	MAY 8.1 7.9 7.8 7.6 7.5 7.7 7.6 7.5 7.5	8.2 8.1 8.1 7.8 7.8 7.9 7.9
DAY 1 2 3 4 5 6 7 8 9 10		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14.4 13.7 11.4 12.1 11.2 12.9 12.7	MIN APRIL 10.8 11.1 10.7 10.5 10.6 10.2 10.1	MEAN 12.1 12.1 11.2 11.0 10.8 11.0 11.0	8.3 8.1 8.3 7.9 7.9 8.1 8.0 7.8 7.7	MAY 8.1 7.9 7.8 7.6 7.5 7.7 7.6 7.5 7.6 7.5	8.2 8.1 8.1 7.8 7.8 7.9 7.9 7.8 7.7
DAY 1 2 3 4 5 5 6 7 8 9 10 11 12		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14.4 13.7 11.4 12.1 11.2 12.9 12.7 10.6 11.5	MIN APRIL 10.8 11.1 10.7 10.5 10.6 10.2 10.1	MEAN 12.1 12.1 11.2 11.0 10.8 11.0 10.1 9.9	MAX 8.3 8.1 8.3 7.9 7.9 8.1 8.0 7.8 7.8 7.8	MAY 8.1 7.9 7.8 7.6 7.5 7.7 7.6 7.5 7.7 7.6 7.5 7.7	8.2 8.1 7.8 7.8 7.9 7.9 7.7 7.7
DAY 1 2 3 4 5 6 7 8 9 10 11		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14.4 13.7 11.4 12.1 11.2 12.9 12.7	MIN APRIL 10.8 11.1 10.7 10.5 10.6 10.2 10.1	MEAN 12.1 12.1 11.2 11.0 10.8 11.0 11.0	MAX 8.3 8.1 8.3 7.9 7.9 8.1 8.1 8.0 7.8 7.7	MAY 8.1 7.9 7.8 7.6 7.5 7.7 7.6 7.5 7.6 7.5 7.7	8.2 8.1 7.8 7.8 7.9 7.9 7.7 7.7
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX14.4 13.7 11.4 12.1 11.2 12.9 12.7 10.6 11.5 10.5	MIN APRIL 10.8 11.1 10.7 10.5 10.6 10.2 10.1 9.4 9.1 9.0	MEAN 12.1 12.1 11.2 11.0 10.8 11.0 10.1 9.9 9.6	MAX 8.3 8.1 8.3 7.9 7.9 8.1 8.0 7.8 7.7	MAY 8.1 7.9 7.8 7.6 7.5 7.7 7.6 7.5 7.5 7.4 7.4	8.2 8.1 7.8 7.8 7.9 7.9 7.8 7.7 7.7
DAY 1 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15 16		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14.4 13.7 11.4 12.1 11.2 12.9 12.7 10.6 11.5 10.5 10.0 10.2	MIN APRIL 10.8 11.1 10.7 10.5 10.6 10.2 10.1 9.4 9.1 9.0 8.7 9.2	MEAN 12.1 12.1 11.2 11.0 10.8 11.0 11.0 10.1 9.9 9.6 9.4 9.5	8.3 8.1 8.3 7.9 7.9 8.1 8.1 8.0 7.8 7.7	MAY 8.1 7.9 7.8 7.6 7.5 7.7 7.6 7.5 7.4 7.4 7.5 7.2	8.2 8.1 7.8 7.8 7.9 7.9 7.7 7.7 7.6 7.6 7.6 7.7
DAY 1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14.4 13.7 11.4 12.1 11.2 12.9 12.7 10.6 11.5 10.0 10.2 9.8 10.0 9.5	MIN APRIL 10.8 11.1 10.7 10.5 10.6 10.2 10.1 9.4 9.1 9.0 8.7 9.2 9.3 9.3 9.3	MEAN 12.1 12.1 11.2 11.0 10.8 11.0 10.1 9.6 9.4 9.5	MAX 8.3 8.1 8.3 7.9 7.9 8.1 8.0 7.8 7.7 7.8 7.8 7.9 7.9 8.1 8.1 8.1 8.1	MAY 8.1 7.9 7.6 7.5 7.7 7.6 7.5 7.7 7.6 7.5 7.7 7.6 7.5 7.2 7.3 7.2	8.2 8.1 7.8 7.8 7.9 7.9 7.7 7.7 7.6 7.6 7.7 7.6
DAY 1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14.4 13.7 11.4 12.1 11.2 12.9 12.7 10.6 11.5 10.5 10.0 10.2	MIN APRIL 10.8 11.1 10.7 10.5 10.6 10.2 10.1 9.4 9.1 9.0 8.7 9.2 9.3 9.3	MEAN 12.1 12.1 11.2 11.0 10.8 11.0 10.1 9.9 9.6 9.4 9.5	8.3 8.1 8.3 7.9 7.9 8.1 8.0 7.8 7.7 7.8 7.9 7.9 7.9	MAY 8.1 7.9 7.8 7.6 7.5 7.7 7.6 7.5 7.4 7.4 7.5 7.2 7.3	8.2 8.1 7.8 7.8 7.9 7.9 7.7 7.7 7.6 7.6 7.6 7.6
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14.4 13.7 11.4 12.1 11.2 12.9 12.7 10.6 11.5 10.0 10.2 9.8 10.0 9.5 9.3 9.4	MIN APRIL 10.8 11.1 10.7 10.5 10.6 10.2 10.1 9.4 9.1 9.0 8.7 9.2 9.3 9.3 9.3 9.3 9.1 9.1 8.8	MEAN 12.1 12.1 11.2 11.0 10.8 11.0 10.1 9.9 9.6 9.4 9.5 9.6 9.5 9.6 9.5 9.6 9.5 9.6 9.5 9.6 9.9	MAX 8.3 8.1 8.3 7.9 7.9 8.1 8.0 7.8 7.7 7.8 7.8 7.9 7.9 7.8 7.7 7.8 7.8 7.7 7.8 7.7 7.8 7.7 7.8	MAY 8.1 7.9 7.8 7.6 7.5 7.7 7.6 7.5 7.4 7.4 7.5 7.2 7.3 7.4 7.5 7.7 7.6 9 7.4	8.2 8.1 7.8 7.8 7.9 7.9 7.7 7.7 7.6 7.6 7.6 7.6 7.6 7.7 7.6
DAY 1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14.4 13.7 11.4 12.1 11.2 12.9 12.7 10.6 11.5 10.5 10.5 9.8 10.0 9.5 9.3 9.4	MIN APRIL 10.8 11.1 10.7 10.5 10.6 10.2 10.1 9.4 9.1 9.0 8.7 9.2 9.3 9.3 9.3 9.3 9.1 9.1 8.8 8.7	MEAN 12.1 12.1 11.2 11.0 10.8 11.0 11.0 10.1 9.9 9.6 9.4 9.5 9.6 9.5 9.4 9.5	8.3 8.1 8.3 7.9 7.9 8.1 8.0 7.7 7.8 7.8 7.9 7.9 7.8 7.9 7.9	MAY 8.1 7.9 7.8 7.6 7.5 7.7 7.6 7.5 7.6 7.3 7.4 7.4 7.5 7.2 7.0 6.9 7.4 7.4	8.2 8.1 7.8 7.8 7.9 7.9 7.7 7.7 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.3
DAY 1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14.4 13.7 11.4 12.1 11.2 12.9 12.7 10.6 11.5 10.0 10.2 9.8 10.0 9.5 9.3 9.4 9.3 8.9 9.3 9.1	MIN APRIL 10.8 11.1 10.7 10.5 10.6 10.2 10.1 9.4 9.1 9.0 8.7 9.2 9.3 9.3 9.3 9.1 9.1 8.8 8.7 8.8	MEAN 12.1 12.1 11.2 11.0 10.8 11.0 10.1 9.9 9.6 9.4 9.5 9.6 9.5 9.6 9.5 9.8 9.0 8.8 9.0	MAX 8.3 8.1 8.3 7.9 7.9 8.1 8.0 7.8 7.7 7.8 7.8 7.9 7.9 7.8 7.7 8.1 8.1 7.7 7.6 7.8 8.2 8.3 8.4	MAY 8.1 7.9 7.8 7.6 7.5 7.7 7.6 7.5 7.4 7.4 7.5 7.2 7.3 7.4 7.5 7.6 9 7.4 7.6 8.0	8.2 8.1 7.8 7.8 7.9 7.9 7.7 7.7 7.6 7.6 7.6 7.7 7.6 7.6 7.3 7.3 7.8
DAY 1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14.4 13.7 11.4 12.1 11.2 12.9 12.7 10.6 11.5 10.0 10.2 9.8 10.0 9.5 9.3 9.4 9.3 9.1 8.9	MIN APRIL 10.8 11.1 10.7 10.5 10.6 10.2 10.1 9.4 9.1 9.0 8.7 9.2 9.3 9.3 9.3 9.1 9.1 8.8 8.7 8.8 8.7 8.5	MEAN 12.1 12.1 11.2 11.0 10.8 11.0 10.1 9.9 9.6 9.4 9.5 9.6 9.4 9.5 9.6 9.4 9.5 9.6 9.7	MAX 8.3 8.1 8.3 7.9 7.9 8.1 8.0 7.8 7.7 7.8 7.8 7.9 7.9 7.9 8.1 8.1 7.7 7.6 7.8 8.2 8.3 8.4 8.5	MAY 8.1 7.9 7.6 7.5 7.7 7.6 7.5 7.4 7.4 7.5 7.2 7.0 6.9 7.4 7.6 8.0 8.0	8.2 8.1 7.8 7.8 7.9 7.7 7.6 7.6 7.6 7.7 7.6 7.6 7.7 7.6 7.6
DAY 1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14.4 13.7 11.4 12.1 11.2 12.9 12.7 10.6 11.5 10.5 10.0 9.5 9.3 9.4 9.3 8.9 9.3 9.1 8.9 8.6 8.5	MIN APRIL 10.8 11.1 10.7 10.5 10.6 10.2 10.1 9.4 9.1 9.0 8.7 9.2 9.3 9.3 9.3 9.1 9.1 8.8 8.7 8.8 8.7 8.8 8.7 8.8 8.7 8.8	MEAN 12.1 12.1 11.2 11.0 10.8 11.0 11.0 10.1 9.9 9.6 9.4 9.5 9.6 9.5 9.4 9.5 9.6 9.5 9.4 9.5 9.6 9.7 8.8	8.3 8.1 8.3 7.9 7.9 8.1 8.0 7.7 7.8 7.8 7.9 7.9 7.8 7.7 8.1 8.1 7.7 7.6 7.8 8.2 8.3 8.4 8.5	MAY 8.1 7.9 7.8 7.6 7.5 7.7 7.6 7.5 7.4 7.4 7.4 7.5 7.2 7.0 6.9 7.4 7.6 8.0 8.0 7.8 7.7	8.2 8.1 7.8 7.8 7.9 7.9 7.7 7.6 7.6 7.6 7.7 7.6 7.6 7.7 7.6 7.7 8.2 8.2 8.1
DAY 1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14.4 13.7 11.4 12.1 11.2 12.9 12.7 10.6 11.5 10.0 10.2 9.8 10.0 9.5 9.3 9.4 9.3 8.9 9.3 9.1 8.9 8.6 8.5 8.4 8.2	MIN APRIL 10.8 11.1 10.7 10.5 10.6 10.2 10.1 9.4 9.1 9.0 8.7 9.2 9.3 9.3 9.1 9.1 8.8 8.7 8.5 8.3 8.1 8.2 8.0	MEAN 12.1 12.1 11.2 11.0 10.8 11.0 10.1 9.6 9.4 9.5 9.6 9.5 9.4 9.2 9.0 8.8 9.2 9.0 8.8 9.0 8.9 8.7 8.5 8.3 8.3	MAX 8.3 8.1 8.3 7.9 7.9 8.1 8.0 7.8 7.7 7.8 7.9 7.9 7.8 7.7 7.8 8.1 7.7 7.6 7.8 8.2 8.3 8.4 8.5 8.3 8.2 8.0 7.7	MAY 8.1 7.9 7.8 7.6 7.5 7.7 7.6 7.5 7.4 7.4 7.5 7.2 7.3 7.4 7.5 7.6 9 7.4 7.6 8.0 8.0 7.8 7.7 6.4	8.2 8.1 7.8 7.8 7.9 7.7 7.7 7.6 7.6 7.6 7.7 7.6 7.6 7.3 7.3 7.8 7.9 8.2 8.2 8.1 7.8 7.3
DAY 1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28		MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14.4 13.7 11.4 12.1 11.2 12.9 12.7 10.6 11.5 10.0 10.2 9.8 10.0 9.5 9.3 9.4 9.3 9.1 8.9 9.3 9.1 8.9 8.6 8.5 8.4	MIN APRIL 10.8 11.1 10.7 10.5 10.6 10.2 10.1 9.4 9.1 9.0 8.7 9.2 9.3 9.3 9.3 9.1 9.1 8.8 8.7 8.8 8.7 8.5 8.3 8.1 8.2	MEAN 12.1 12.1 11.2 11.0 10.8 11.0 10.1 9.9 9.6 9.4 9.5 9.6 9.4 9.2 9.0 8.8 9.0 8.9 8.7 8.5 8.3 8.3	MAX 8.3 8.1 8.3 7.9 7.9 8.1 8.0 7.8 7.7 7.8 7.8 7.9 7.9 7.9 8.1 8.1 7.7 7.6 7.8 8.2 8.3 8.4 8.5 8.3 8.4	MAY 8.1 7.9 7.6 7.5 7.7 7.6 7.5 7.4 7.4 7.5 7.2 7.0 6.9 7.4 7.6 8.0 8.0 7.8 7.7 7.5	8.2 8.1 7.8 7.9 7.9 7.7 7.6 7.6 7.6 7.7 7.6 7.6 7.7 7.6 7.8 7.9 8.2 8.2 8.1 7.9

8.5 6.4 7.7

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07144790 CHENEY RESERVOIR NEAR CHENEY, KS--Continued OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		OXY	GEN DISSU	DEARD (WG/I	ı), WATE	R YEAR C	CIOBER 200	J TO SE	PTEMBER 200	Τ		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY		1	AUGUST			SEPTEMBE	R
1				14.0	8.1	10.1	7.2	6.2	6.7	7.3	4.9	5.9
2				11.5	7.7	9.5	8.2	6.4	7.1	7.0	5.2	5.9
3							9.0	5.3	7.2	9.8	5.5	7.3
4							8.6	6.7	7.7	8.5	5.5	6.7
5							9.7	6.3	7.8	7.0	4.4	6.1
6							10.2	4.9	6.9	5.9	4.2	4.9
7				8.4			11.2	4.8	7.4	6.9	5.9	6.4
8				8.8	6.7	7.8	10.6	6.6	8.6	7.7	6.6	7.1
9 10				10.2 9.6	7.4 4.8	8.3 7.6	9.5 7.7	7.2 4.8	8.2 5.9	8.4 7.5	6.6 6.6	7.3 7.0
10				5.0	1.0	7.0	,.,	1.0	3.7	7.5	0.0	7.0
11				7.4	4.8	6.7	10.4	5.4	7.2	7.1	6.2	6.7
12				9.8 9.7	6.8	7.9	11.0	4.7	7.5	7.1	6.2 5.7	6.6
13 14				9.0	6.8 7.0	8.3 8.2	7.9 6.1	2.6 3.8	5.4 5.2	7.3 7.1	5.7	6.4 6.2
15				7.0	3.2	4.9	8.0	5.3	6.8	7.0	5.9	6.4
1.6	0.6	0.6	0.0		2 0		10.0					
16 17	9.6 8.6	8.6 8.1	9.0 8.4	7.0 7.4	3.8 6.1	6.1 6.8	10.2 8.7	5.3 5.7	7.6 7.1	7.0 6.3	6.0 5.1	6.3 5.9
18	8.7	8.1	8.4	7.8	6.4	7.1	10.7	6.8	8.6	7.2	5.0	6.1
19	10.2	8.2	8.9	7.3	6.7	6.9	9.3	6.0	8.2	7.8	6.3	7.0
20	9.4	7.8	8.6	7.2	6.4	6.7				7.1	6.5	6.8
21	10.6	8.1	9.2	7.7	6.1	6.9				6.9	5.9	6.4
22	12.2	8.5	10.0	7.1	6.1	6.7				6.6	5.8	6.2
23	10.5	8.1	8.9	7.3	6.1	6.6	777			7.8	6.4	7.3
24 25	10.0 9.3	8.5 8.4	9.2 8.8	7.1 6.7	6.1 5.8	6.6 6.4	6.9 8.2	5.9 5.9	6.5 6.8	8.3 8.4	7.4 7.2	7.7 7.7
23	9.3	0.1	0.0	0.7	5.0	0.4	0.2	3.9	0.0	0.4	1.2	/./
26	9.9	8.0	8.7	6.3	5.0	5.8	7.9	6.3	7.0	8.1	6.9	7.3
27	8.9	7.6	8.3	6.7	5.6	6.3	9.6	6.3	7.3	8.1	7.0	7.3
28 29	9.6 9.7	8.1 8.2	8.7 8.7	7.3 7.5	5.8 5.7	6.6 6.3	10.2 8.5	6.0 6.5	7.5 7.5	7.6 8.2	7.2 7.2	7.4 7.5
30	10.4	7.7	9.0	6.7	5.2	6.1	7.4	6.1	6.9	8.5	7.2	7.6
31				6.9	6.2	6.5	8.0	4.7	6.4			
MONITHI										0 0	4 0	6 7
MONTH										9.8	4.2	6.7
TURBIDIT	TY, FIEL	D, WATER	, UNFILTE	ERED, NEPHE	CLOMETRI	C TURBIC	ITY UNITS,	WATER	YEAR OCTOBE	R 2000 T	O SEPTEM	BER 20
TURBIDIT DAY	MAX	MIN	MEAN	MAX	MIN	C TURBIC MEAN	ITY UNITS,	MIN	YEAR OCTOBE MEAN	R 2000 T	MIN	MEAN
	MAX		MEAN	MAX								
DAY	MAX	MIN	MEAN	MAX	MIN			MIN		MAX	MIN MAY	MEAN
DAY 1 2	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN		MIN	
DAY 1 2 3	MAX	MIN FEBRUARY 	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN 	MAX 38 42 42	MIN MAY 32 33 26	MEAN 35 37 33
DAY 1 2 3 4	MAX	MIN FEBRUARY 	MEAN	MAX	MIN MARCH	MEAN	MAX 14	MIN APRIL 9.4	MEAN 11	MAX 38 42 42 32	MIN MAY 32 33 26 27	MEAN 35 37 33 28
DAY 1 2 3	MAX	MIN FEBRUARY 	MEAN	MAX	MIN MARCH	MEAN	MAX	MIN APRIL	MEAN 	MAX 38 42 42	MIN MAY 32 33 26	MEAN 35 37 33
DAY 1 2 3 4 5	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19	MIN APRIL 9.4 10	MEAN 11 14	38 42 42 32 34	MIN MAY 32 33 26 27 28	MEAN 35 37 33 28 31
DAY 1 2 3 4 5	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19	MIN APRIL 9.4 10 11 12	MEAN 11 14 13 14	38 42 42 32 34 56 40	MIN MAY 32 33 26 27 28 29 28	MEAN 35 37 33 28 31 33 32
DAY 1 2 3 4 5	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21	MIN APRIL 9.4 10 11 12 12	MEAN 11 14 13 14 15	38 42 42 32 34 56 40 31	MIN MAY 32 33 26 27 28 29 28 25	MEAN 35 37 33 28 31 33 32 27
DAY 1 2 3 4 5	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19	MIN APRIL 9.4 10 11 12	MEAN 11 14 13 14	38 42 42 32 34 56 40	MIN MAY 32 33 26 27 28 29 28	MEAN 35 37 33 28 31 33 32
DAY 1 2 3 4 5 6 7 8 9 10	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20	MIN APRIL 9.4 10 11 12 12 12 14	MEAN 11 14 13 14 15 19 17	38 42 42 32 34 56 40 31 38 38	MIN MAY 32 33 26 27 28 29 28 25 27 28	MEAN 35 37 33 28 31 33 22 7 30 34
DAY 1 2 3 4 5 6 7 8 9 10 11	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20	MIN APRIL 9.4 10 11 12 12 12 14 14	MEAN 11 14 13 14 15 19 17	MAX 38 42 42 32 34 56 40 31 38 38 38	MIN MAY 32 33 26 27 28 29 28 25 27 28 29	MEAN 35 37 33 28 31 33 22 7 30 34
DAY 1 2 3 4 5 5 6 7 8 9 10 11 12	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150	MIN APRIL 9.4 10 11 12 12 12 14 14 34	MEAN 11 14 13 14 15 19 17	38 42 42 32 34 56 40 31 38 38 38	MIN MAY 32 33 26 27 28 29 28 25 27 28	MEAN 35 37 33 28 31 33 22 7 30 34 33 31
DAY 1 2 3 4 5 5 6 7 7 8 9 10 11 12 13 14	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 150 47 41	MIN APRIL 9.4 10 11 12 12 12 14 14 34 29 30	MEAN 11 14 13 14 15 19 17	MAX 38 42 42 32 34 56 40 31 38 38 36 34 31 34	MIN MAY 32 33 36 27 28 29 28 25 27 28 29 26 24 26	MEAN 35 37 33 28 31 33 22 7 30 34 33 31 26 28
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 150 47	MIN APRIL 10 11 12 12 12 12 14 14 34 29	MEAN 11 14 13 14 15 19 17 32 57 37	MAX 38 42 42 32 34 56 40 31 38 38 36 34 31	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24	MEAN 35 37 33 28 31 33 22 7 30 34 33 31 26
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 150 47 41 57	MIN APRIL 9.4 10 11 12 12 12 12 14 14 34 29 30 31	MEAN 11 14 13 14 15 19 17 32 57 37 36 46	MAX 38 42 42 32 34 56 40 31 38 38 36 34 31 34 37	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24 26 30	MEAN 35 37 33 28 31 33 22 7 30 34 33 31 26 28 32
DAY 1 2 3 4 5 5 6 7 7 8 9 10 11 12 13 14	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 150 47 41	MIN APRIL 9.4 10 11 12 12 12 14 14 34 29 30	MEAN 11 14 13 14 15 19 17 32 57 37 36	MAX 38 42 42 32 34 56 40 31 38 38 36 34 31 34	MIN MAY 32 33 36 27 28 29 28 25 27 28 29 26 24 26	MEAN 35 37 33 28 31 33 22 7 30 34 33 31 26 28
DAY 1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 150 47 41 57	MIN APRIL 9.4 10 11 12 12 12 14 14 34 29 30 31 31 25 27	MEAN 11 14 13 14 15 19 17 32 57 37 36 46 46 39 40 36	MAX 38 42 42 32 34 56 40 31 38 38 36 34 31 34 37 37 59 28	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24 26 30 24 21 19	MEAN 35 37 33 28 31 33 22 7 30 34 33 31 26 28 32 29 27 22
DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 150 47 41 57 45 48 44 53	MIN APRIL 9.4 10 11 12 12 12 14 14 34 29 30 31 31 25 27 37	MEAN 11 14 13 14 15 19 17 32 57 37 36 46 39 40 36 46 46	MAX 38 42 42 32 34 56 40 31 38 38 36 34 37 37 59 28 20	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24 26 30 24 21 19 18	MEAN 35 37 33 28 31 33 22 7 30 34 33 31 26 28 32 29 27 22 19
DAY 1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 150 47 41 57	MIN APRIL 9.4 10 11 12 12 12 14 14 34 29 30 31 31 25 27	MEAN 11 14 13 14 15 19 17 32 57 37 36 46 46 39 40 36	MAX 38 42 42 32 34 56 40 31 38 38 36 34 31 34 37 37 59 28	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24 26 30 24 21 19	MEAN 35 37 33 28 31 33 22 7 30 34 33 31 26 28 32 29 27 22
DAY 1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 150 47 41 57 45 48 44 53 50	MIN APRIL 9.4 10 11 12 12 12 14 34 29 30 31 31 25 27 37 38 36	MEAN 11 14 13 14 15 19 17 32 57 37 36 46 39 40 36 46 43 44	MAX 38 42 42 32 34 56 40 31 38 36 34 37 59 28 20 45	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24 26 30 24 21 19 18 18	MEAN 35 37 33 28 31 33 22 7 30 34 33 31 26 28 32 29 27 21 41
DAY 1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 47 41 57 45 48 44 53 50 50 57	MIN APRIL 9.4 10 11 12 12 12 14 14 34 29 30 31 31 25 27 37 37 38 36 42	MEAN 11 14 13 14 15 19 17 32 57 37 36 46 39 40 36 46 43 44	38 42 42 32 34 56 40 31 38 38 36 34 31 37 59 28 20 45	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24 26 30 24 21 19 18 18	MEAN 35 37 33 28 31 33 22 30 34 33 31 26 28 32 29 27 22 19 21 41 29
DAY 1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 150 47 41 57 45 48 44 53 50 50 50 57 90	MIN APRIL 9.4 10 11 12 12 12 14 14 34 29 30 31 31 25 27 37 38 36 42 55	MEAN 11 14 13 14 15 19 17 32 57 37 36 46 46 43 44 48 72	MAX 38 42 42 32 34 56 40 31 38 38 36 34 31 34 37 37 59 28 20 45 50 36 35	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24 26 30 24 21 19 18 18 18	MEAN 35 37 33 28 31 33 22 7 30 34 33 31 26 28 32 29 27 22 19 21
DAY 1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 47 41 57 45 48 44 53 50 50 57	MIN APRIL 9.4 10 11 12 12 12 14 14 34 29 30 31 31 25 27 37 37 38 36 42	MEAN 11 14 13 14 15 19 17 32 57 37 36 46 39 40 36 46 43 44	38 42 42 32 34 56 40 31 38 38 36 34 31 37 59 28 20 45	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24 26 30 24 21 19 18 18	MEAN 35 37 33 28 31 33 22 30 34 33 31 26 28 32 29 27 22 19 21 41 29
DAY 1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 150 47 41 57 45 48 44 53 50 50 50 57 90 55 40	MIN APRIL 9.4 10 11 12 12 12 14 14 34 29 30 31 31 25 27 37 38 36 42 55 37 32	MEAN 11 14 13 14 15 19 17 32 57 37 36 46 46 39 40 36 46 43 44 48 72 42 35	MAX 38 42 42 32 34 56 40 31 38 38 36 34 31 34 37 37 59 28 20 45 50 36 35 31 23	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24 26 30 24 21 19 18 18 18 14 23 16	MEAN 35 37 33 28 31 33 22 7 30 34 33 31 26 28 32 29 27 22 19 21 41 29 21 26 20
DAY 1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 150 47 41 57 45 48 44 53 50 50 57 90 55 40	MIN APRIL 9.4 10 11 12 12 12 12 14 14 29 30 31 31 25 27 37 38 36 42 55 37 32 31	MEAN 11 14 13 14 15 19 17 32 57 37 36 46 46 39 40 36 46 43 44 48 72 42 35	MAX 38 42 42 32 34 56 40 31 38 36 34 37 59 28 20 45 50 36 35 31 23 18	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24 26 30 24 21 19 18 18 18 31 18 11 18 11 18 11 11 11 11 11 11 11 11	MEAN 35 37 33 28 31 33 27 30 34 33 31 26 28 32 29 27 22 19 21 41 29 21 26 20 14
DAY 1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 150 47 41 57 45 48 44 53 50 50 50 57 90 55 40	MIN APRIL 9.4 10 11 12 12 12 14 14 34 29 30 31 31 25 27 37 38 36 42 55 37 32	MEAN 11 14 13 14 15 19 17 32 57 37 36 46 46 39 40 36 46 43 44 48 72 42 35	MAX 38 42 42 32 34 56 40 31 38 38 36 34 31 34 37 37 59 28 20 45 50 36 35 31 23	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24 26 30 24 21 19 18 18 18 14 23 16	MEAN 35 37 33 28 31 33 22 7 30 34 33 31 26 28 32 29 27 22 19 21 41 29 21 26 20
DAY 1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 150 47 41 57 45 48 44 53 50 50 57 90 55 40 38 39 38 40	MIN APRIL 9.4 10 11 12 12 12 12 14 14 34 29 30 31 31 25 27 37 38 36 42 25 55 37 32 31 32 31 32 33 31	MEAN 11 14 13 14 15 19 17 32 57 37 36 46 46 39 40 36 46 43 44 48 72 42 35 35 35 36 36 36	MAX 38 42 42 32 34 56 40 31 38 38 36 34 31 34 37 59 28 20 45 50 36 35 31 23 18 13 11 21	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24 26 30 24 21 19 18 18 18 31 18 11 7.2 4.2 4.1	MEAN 35 37 33 28 31 33 227 30 34 33 31 26 28 32 29 27 22 19 21 41 29 21 26 20 14 8.6 8.4 8.2
DAY 1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 47 41 57 45 48 44 53 50 50 57 90 55 40 38 39 38 40 41	MIN APRIL 9.4 10 11 12 12 12 14 14 34 29 30 31 31 25 27 37 37 38 36 42 55 37 32 31 32 33 31 33 33	MEAN 11 14 13 14 15 19 17 32 57 37 36 46 46 43 44 48 72 42 35 35 36 36 36 37	38 42 42 32 34 56 40 31 38 38 36 34 37 37 59 28 20 45 50 36 35 31 23 11 23	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24 21 19 18 18 11 18 14 23 16 11 7.2 4.1 8.7	MEAN 35 37 33 28 31 33 22 27 30 34 33 31 26 28 32 29 27 22 19 21 41 29 21 41 29 21 41 29 21 41 29 21 8.6 8.4 8.2 18
DAY 1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 150 47 41 57 45 48 44 53 50 50 57 90 55 40 38 39 38 40	MIN APRIL 9.4 10 11 12 12 12 12 14 14 34 29 30 31 31 25 27 37 38 36 42 25 55 37 32 31 32 31 32 33 31	MEAN 11 14 13 14 15 19 17 32 57 37 36 46 46 39 40 36 46 43 44 48 72 42 35 35 35 36 36 36	MAX 38 42 42 32 34 56 40 31 38 38 36 34 31 34 37 59 28 20 45 50 36 35 31 23 18 13 11 21	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24 26 30 24 21 19 18 18 18 31 18 11 7.2 4.2 4.1	MEAN 35 37 33 28 31 33 227 30 34 33 31 26 28 32 29 27 22 19 21 41 29 21 26 20 14 8.6 8.4 8.2
DAY 1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	MAX	MIN FEBRUARY	MEAN	MAX	MIN MARCH	MEAN	MAX 14 19 15 19 21 36 20 150 47 41 57 45 48 44 53 50 50 57 90 55 40 38 39 38 40 41	MIN APRIL 9.4 10 11 12 12 12 14 14 34 29 30 31 31 25 27 37 37 38 36 42 55 37 32 31 32 33 31 33 33	MEAN 11 14 13 14 15 19 17 32 57 37 36 46 46 43 44 48 72 42 35 35 36 36 36 37	38 42 42 32 34 56 40 31 38 38 36 34 37 37 59 28 20 45 50 36 35 31 23 11 23	MIN MAY 32 33 26 27 28 29 28 25 27 28 29 26 24 21 19 18 18 11 18 14 23 16 11 7.2 4.1 8.7	MEAN 35 37 33 28 31 33 22 7 30 34 33 31 26 28 32 29 27 22 19 21 41 29 21 41 29 21 41 29 21 41 29 21 8.6 8.4 8.2

07144790 CHENEY RESERVOIR NEAR CHENEY, KS--Continued

TURBIDITY, FIELD, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 20 DAY MAX MIN MEAN MAX MIN MEAN MAX MIN MEAN MAX MIN MEAN AUGUST JUNE JULY SEPTEMBER 9.6 8.1 7.2 11 12 22 36 23 3 4 5 29 21 24 24 21 9.5 5.8 9.1 9.6 e17 8.5 7 ___ --e18 12 7.9 37 28 20 9.2 e19 23 20 6.2 4.7 5.3 7.6 6.7 20 30 14 17 15 8.4 9.4 5.2 13 19 17 14 20 17 15 13 30 30 17 18 13 12 10 9.0 20 22 32 19 17 27 10 9.9 40 22 17 9.1 19 17 17 12 14 20 57 22 34 25 27 25 17 24 23 18 9.4 10 12 27 24 22 16 28 25 12 16 16 20 13 8.0 8.3 24 9.3 31 27 23 13 17

5.1

5.8

4.7

MONTH

e Estimated

07144795 NORTH FORK NINNESCAH RIVER AT CHENEY DAM, KS

LOCATION.--Lat $37^{\circ}43^{\circ}17^{\circ}$, long $97^{\circ}47^{\circ}39^{\circ}$, in NE $^{1}/_{4}$ SW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.6, T.27 S., R.4 W., Sedgwick County, Hydrologic Unit 11030014, on right bank 1,400 ft downstream from Cheney Dam, 6.0 mi north of Cheney, and at mile 15.5.

DRAINAGE AREA.--901 mi^2 , of which 237 mi^2 is probably noncontributing.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and concrete Parshall flume. Datum of gage is 1,366.02 ft above sea level (Bureau of Reclamation bench mark). Prior to Oct. 1, 1973, at datum 1.00 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow completely regulated since 1964 by Cheney Reservoir (station 07144790), 1,400 ft upstream. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES

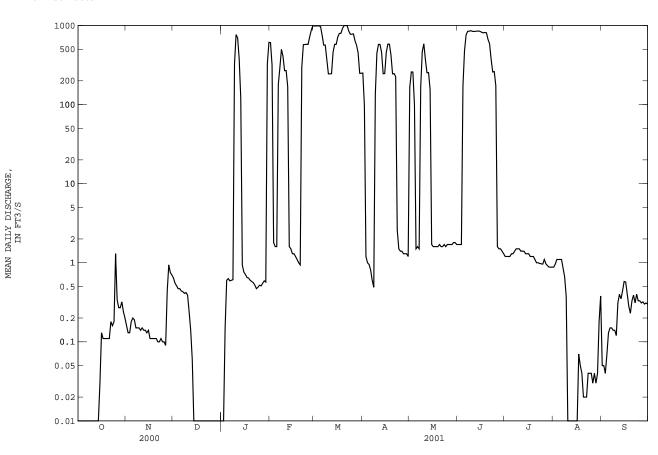
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	e.16 e.13 .13 .18 .20	.64 .55 .51 .47	e.00 e.00 e.15 e.60	609 316 1.8 1.6 1.6	987 988 990 990 969	251 99 1.2 1.0 .95	165 259 258 100 1.5	1.7 1.7 1.7 173 482	1.2 1.2 1.2 1.2 1.3	.88 .96 1.1 1.1	.05 .05 .04 .07
6 7 8 9 10	.00	.19 .15 .15 .15	.44 .43 .41 .42 e.39	.59 .60 .61 327 768	180 294 500 407 269	754 566 567 371 245	.81 .60 .49 136 449	1.6 1.5 167 470 587	761 845 849 862 844	1.3 1.4 1.5 1.5	1.1 .85 .66 .37	.15 .15 .14 .14
11 12 13 14 15	.00 .00 .00 .00	.15 .14 .14 .13 .14	e.24 e.14 e.06 e.00 e.00	698 e376 121 .93 .76	270 169 1.6 e1.5 e1.3	245 246 461 579 578	578 576 458 246 247	371 253 254 156 1.7	843 845 850 854 841	1.4 1.4 1.3 1.3	.00 .00 .00 .00	.31 .40 .35 .44
16 17 18 19 20	.13 .11 .11 .11	.11 .11 .11 .11	e.00 e.00 e.00 e.00	.71 .65 .64 e.60 e.58	e1.3 e1.2 1.1 1.0 .94	717 795 797 917 1000	458 582 581 422 245	1.6 1.6 1.6 1.6	823 809 817 810 669	1.3 1.2 1.2 1.2	.00 .07 .05 .04	.57 e.40 e.28 .23 .33
21 22 23 24 25	.11 .18 .16 .18	.10 .10 .11 .10	e.00 e.00 e.00 e.00	e.56 e.52 .47 .49	297 573 576 579 577	998 999 852 778 777	247 226 2.6 1.5 1.4	1.6 1.6 1.7 1.6 1.7	589 376 259 262 174	1.0 1.0 .98 .97	.02 .02 .04 .04	.39 .31 .40 .33
26 27 28 29 30 31	.34 .27 .27 .32 e.24 e.20	.09 .44 .94 .75 .70	e.00 e.00 e.00 e.00 e.00	.51 .55 .59 .57 330 614	714 862 994 	784 643 564 452 249 249	1.4 1.3 1.3 1.3	1.7 1.7 1.7 1.8 1.8	1.6 1.5 1.5 1.4 1.3	1.1 .97 .92 .88 .88	.03 .04 .03 .04 .18	.31 .32 .30 .31 .30
MEAN MAX MIN AC-FT	.13 1.3 .00 8.3	.21 .94 .09	.17 .64 .00	105 768 .00 6440	293 994 .94 16270	681 1000 245 41870	194 582 .49 11540	99.1 587 1.5 6100	488 862 1.3 29060	1.18 1.5 .88 73	.30 1.1 .00 18	.27 .58 .04

07144795 NORTH FORK NINNESCAH RIVER AT CHENEY DAM, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	3	MAR	APR	N	IAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	113 1054 1974 .13 2001	128 1782 1980 .13 1996	62.8 334 1993 .14 1996	65.5 360 1998 .12 1984	99.5 569 1993 .077 1984		145 681 2001 .11 1965	225 933 1973 .11 1965	11 19	102 142 193 14 165	208 1504 1995 .10 1966	115 1162 1987 .12 1966	27.0 377 1993 .11 1985	78.6 973 1977 .031 2000
SUMMARY	STATIST:	ICS	FOR 2	2000 CALEND	AR YE	AR	F	OR 2001 1	WATER	YEAR		WATER YE	ARS 1965	- 2001
LOWEST	ANNUAL I	EAN		61.0				154				122 406 .32		1993 1968
LOWEST	DAILY MEA			1380 .00 .00	Apr Sep Sep	4 9 9			Ma 00 Oc 00 Oc			1910 .00	May	30 1969 18 1966 16 1980
MAXIMUM MUMIXAM	PEAK FLO	OW AGE		.00	DCF			1050 4.	Ma 89 Ma			2070 5.51 .00	Nov Jul	13 1979 13 1987 t times
ANNUAL 10 PERC	RUNOFF (A CENT EXCE CENT EXCE	AC-FT) EDS		44290 1.4 .41				111400 681		1		88570 390		c cimes
	ENT EXCE			.00					00			.15		

e Estimated



07144910 SOUTH FORK NINNESCAH RIVER NEAR PRATT, KS

LOCATION.--Lat $37^{\circ}38^{\circ}16^{\circ}$, long $98^{\circ}43^{\circ}14^{\circ}$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ Sec.2, T.28 S., R.13 W., Pratt County, Hydrologic Unit 11030015, on left bank at downstream side of county highway bridge, 500 ft southwest of sewage disposal facility at Pratt, 3.3 mi downstream from major left bank tributary, and at mile 135.2.

DRAINAGE AREA. -- 117 mi², approximately.

PERIOD OF RECORD. -- October 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,820.83 ft above sea level.

REMARKS.--Records fair. Flow regulated at times by State Fish Hatchery diversion, 0.5 mi upstream. Satellite telemeter at station.

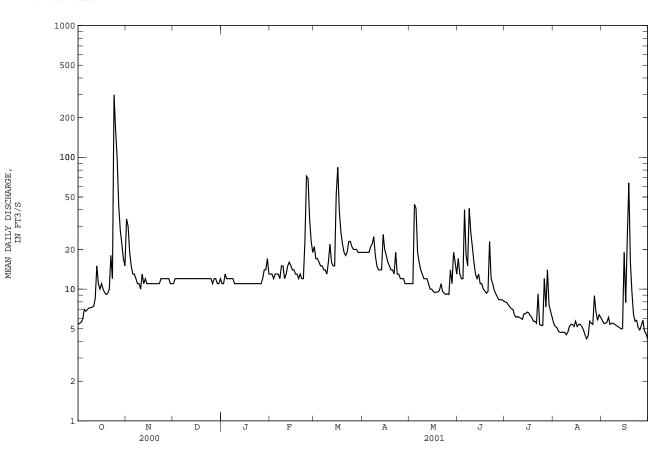
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV DEC JAN FEB JUL AUG SEP 5.4 8.0 5.5 5.8 5.5 17 7.9 7.6 5.5 5.2 5.6 5.9 12 5 1 7.3 4.8 5.6 7.0 7.1 6.1 6.8 7.0 4.7 5.4 7.0 7.2 7.2 6.3 4.7 5.5 6.1 4 7 5.5 5.4 6.2 4.5 7.3 6.1 4.7 5.3 5.2 6.0 5.2 5.1 8.5 5.9 5.4 5.4 6.5 6.5 5.2 5.0 6.7 5.7 9.6 6.6 5.2 7.9 18 10 9.4 11 12 11 13 27 15 9.4 9.7 6.3 5.4 9.1 9.3 9.5 9.3 9.8 9.6 5.7 4.9 9.4 5.5 6.4 4.5 12 12 11 13 9.6 9.3 11 9.2 5.4 4.2 5.7 5.8 e298 5.3 9.2 9.2 5.3 5.5 4.9 9.1 8.7 5.3 12 12 11 11 8.3 8.3 7.3 8.9 6.7 5.8 4.8 7.6 5.8 ___ 8.1 6.8 6.4 4.2 6.1 6.1 MEAN 28 7 13 2 11 9 11.7 17 19 0 22 3 16 3 13 7 14 6 6 97 5 33 8 96 8.9 MAX MIN 5.4 9.1 8.1 5.3 4.2 4.2 AC-FT

07144910 SOUTH FORK NINNESCAH RIVER NEAR PRATT, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	13.4 42.2 1986 6.02 1995	15.8 81.5 1997 7.73 1995	12.5 28.5 1985 9.17 1992	12.2 16.8 1998 9.04 1992	13.2 22.8 2000 8.89 1992	22.3 110 2000 9.61 1996	27.0 251 1991 7.61 1992	30.8 160 1995 7.20 1992	21.1 46.9 1995 6.76 1994	24.2 143 1997 5.72 1990	19.8 169 1996 3.55 1990	12.7 100 1996 4.24 1984
SUMMARY	STATISTI	CS	FOR 2	2000 CALEN	DAR YEAR	F	OR 2001 WAT	TER YEAR		WATER YEA	ARS 1981	- 2001
	MEAN ANNUAL N ANNUAL ME			26.5			14.4			18.8 39.4 10.0		1997 1981
HIGHEST	DAILY ME	EAN		1730	Mar 23		298	Oct 24		6240	Apr	13 1991
	DAILY MEA			5.4	Oct 1		4.2	Aug 22		.85	Sep	8 1990
		MINIMUM		5.7	Sep 28		4.7	Aug 4		1.1	Sep	3 1990
	PEAK FLO						844	Oct 24		26200		13 1991
	PEAK STA						7.98	Oct 24		14.27		13 1991
	ANEOUS LO						3.5	Aug 22		.75	Sep	7 1990
	RUNOFF (A	- ,		19240			10400			13620		
	ENT EXCEE			29			20			19		
50 PERC	ENT EXCEE	EDS		12			12			11		
90 PERC	ENT EXCEE	EDS		7.2			5.4			5.9		

e Estimated



07145200 SOUTH FORK NINNESCAH RIVER NEAR MURDOCK, KS

LOCATION.--Lat 37°33'51", long 97°51'10", in SW $^{1}/_{4}$ SW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.34, T.28 S., R.5 W., Kingman County, Hydrologic Unit 11030015, on right bank at upstream side of county highway bridge, 4.0 mi southeast of Murdock, and at mile 68.0.

DRAINAGE AREA.--650 mi^2 , of which 107 mi^2 is probably noncontributing.

PERIOD OF RECORD.--August 1950 to September 1959. Annual maximums, water years 1960-64. June 1964 to current year.

REVISED RECORDS. -- WSP 1561: 1957(P).

GAGE.--Water-stage recorder. Datum of gage is 1,357.81 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to Mar. 30, 1951, nonrecording gage, Mar. 30, 1951, to Sept. 30, 1959, water-stage recorder, and Oct. 1, 1959, to June 3, 1964, crest-stage gage, at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

PEAK DISCHARGES GREATER THAN BASE FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 $\mathrm{ft^3/s}$ and maximum (*): Gage Gage Discharge height Discharge height Date Time ($\mathrm{ft^3/s}$) (ft) Date Time ($\mathrm{ft^3/s}$) (ft) Mar. 23 1900 *14,200 *°10.40 Mar. 25 0100 4,1607.95

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

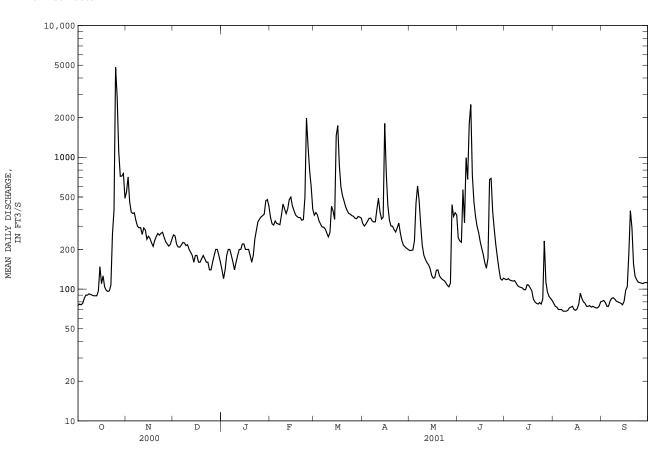
Date	Tir	me	Discharge (ft ³ /s)	e Gag	e height (ft)		Date	Time		Discharge (ft ³ /s)		height ft)
Oct 25 Feb 24 Mar 15	170 140 200	00	*10,000 3,230 2,960		*9.63 7.49 7.34		Apr 15 Jun 9	0700 0400		2,890 4,290		7.30 3.01
		DISCHA	ARGE, CUBIC	FEET PE		WATER YE Y MEAN VA		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	547	258	e140	351	364	314	196	245	119	78	81
2	77	710	253	e120	313	381	301	197	232	118	74	82
3	76	459	219	e140	306	365	312	198	227	120	73	79
4	78	384	209	e180	329	330	327	233	567	117	70	74
5	85	375	208	e200	315	311	344	450	319	116	70	74
6	90	379	216	e200	312	296	346	606	993	115	70	81
7	90	331	226	e180	308	295	329	468	679	116	68	85
8	92	300	224	e160	364	286	323	306	1780	111	68	86
9	91	292	214	e140	443	266	324	214	2520	106	68	84
10	90	293	217	e160	406	249	403	181	731	104	69	81
11	89	260	e200	e180	374	269	489	168	463	103	72	80
12	89	291	e190	e200	406	425	384	159	358	102	73	79
13	89	281	e180	e200	478	391	340	153	300	99	74	78
14	97	239	e160	e220	499	338	351	143	269	99	70	76
15	148	252	e180	e220	427	1460	1810	127	230	108	69	81
16	110	242	e180	e200	395	1740	754	121	204	107	71	98
17	126	224	e160	e200	366	867	432	122	182	102	77	104
18	104	211	e160	e200	355	598	334	139	158	97	93	185
19	98	234	e170	e180	349	512	301	140	144	84	85	393
20	96	251	e180	e160	349	466	300	126	172	80	80	291
21	97	264	e170	e180	333	422	283	121	678	78	78	155
22	107	257	e160	e240	337	395	271	118	692	77	74	125
23	261	265	e160	e280	494	375	292	116	387	79	74	118
24	400	270	e140	325	1980	370	317	112	284	77	75	113
25	4830	248	e140	340	1210	361	266	107	217	84	73	112
26 27 28 29 30 31	2890 1110 718 721 753 489	229 220 212 219 239	e160 e180 e200 e200 e180 e160	353 361 371 468 478 425	795 598 404 	357 345 342 356 352 346	232 215 209 204 200	104 111 438 356 380 365	e174 e142 e120 117 121	232 113 95 88 85 82	74 73 72 72 74 80	111 110 112 112 112
MEAN	460	299	189	239	486	459	377	219	457	104	73.9	115
MAX	4830	710	258	478	1980	1740	1810	606	2520	232	93	393
MIN	75	211	140	120	306	249	200	104	117	77	68	74
AC-FT	28300	17810	11610	14680	26970	28230	22430	13440	27180	6370	4540	6850

07145200 SOUTH FORK NINNESCAH RIVER NEAR MURDOCK, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	208 1215 1974 38.4 1957	198 820 1980 71.9 1957	166 319 1974 79.6 1957	155 305 1988 72.1 1957	187 486 2001 113 1981	269 1110 1973 93.9 1955	260 726 1973 84.3 1955	318 1100 1957 86.7 1956	312 1808 1957 41.5 1956	166 889 1987 31.2 1954	114 372 1977 13.7 1956	172 1271 1973 19.0 1956
SUMMARY	STATIST	ICS	FOR 2	2000 CALEI	NDAR YEAR	F	OR 2001	WATER YE	AR	WATER YE	ARS 1951	- 2001
	MEAN ANNUAL M ANNUAL ME			282			288			211 371 89.0		1973 1956
LOWEST	DAILY MEA DAILY MEA SEVEN-DAY	AN .		6790 58 59	Mar 23 Aug 27 Aug 25		4830 68 69	Oct : Aug Aug	25 7 4	18000 7.9 8.8	Oct Aug Aug	31 1979 4 1956 3 1956
MAXIMUM MAXIMUM	SEVEN-DAI 1 PEAK FLO 1 PEAK STA	OW AGE		39	Aug 25		10000	Oct :	25	28700 12.84 5.0	Oct	31 1979 31 1979 5 1964
ANNUAL 10 PERC 50 PERC	RUNOFF (A CENT EXCENT CENT EXCENT CENT EXCENT	AC-FT) EDS EDS		204500 469 160 69			208400 467 204 78			153000 310 136 67		

e Estimated



07145500 NINNESCAH RIVER NEAR PECK, KS

LOCATION.--Lat $37^{\circ}27^{\circ}26^{\circ}$, long $97^{\circ}25^{\circ}20^{\circ}$, in NW $^{1}/_{4}$ SW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.10, T.30 S., R.1 W., Summer County, Hydrologic Unit 11030016, on right bank at downstream side of county highway bridge, 3.0 mi southwest of Peck, and at mile 31.6.

DRAINAGE AREA.--2,129 mi^2 , of which 344 mi^2 is probably noncontributing.

PERIOD OF RECORD.--October 1937 to current year. Prior to April 1938 monthly discharge only, published in WSP 1311.

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1211: 1944(M). WSP 1241: 1944, 1945(M), 1947-48(M).

GAGE.--Water-stage recorder. Datum of gage is 1,222.38 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Feb. 4, 1939, nonrecording gage at present site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow partially regulated since 1964 by Cheney Reservoir (station 07144790). Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 9, 1923, reached a stage of 26.4 ft from floodmark, discharge, about 70,000 ${\rm ft}^3/{\rm s}$.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,900 ft³/s, Oct. 26, gage height, 15.68 ft; minimum discharge, 53 ft³/s, Aug. 30, gage height, 2.99 ft.

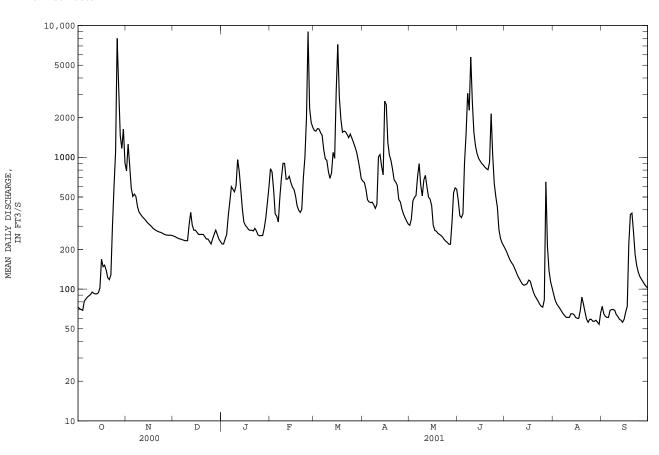
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

		DISCHA	RGE, CUBI	C FEET PE		Y MEAN VA		.R 2000 IC	SEPIEMBE	R 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	790	253	e220	820	1600	660	305	470	202	91	74
2	71	1260	250	e220	773	1580	644	338	361	191	82	65
3	70	868	246	e240	566	1650	572	467	349	178	77	62
4	69	587	243	e260	372	1640	476	497	374	167	74	61
5	81	505	240	e360	357	1540	459	513	906	159	71	61
6	84	526	239	e460	323	1470	453	717	1520	153	68	69
7	87	503	236	599	e500	1150	457	894	3060	144	65	70
8	89	423	234	572	e700	976	436	616	2280	135	63	70
9	91	384	233	547	e900	948	410	510	5770	126	61	69
10	95	369	233	612	e900	781	440	673	2620	120	61	64
11	93	355	309	961	682	692	1010	730	1540	114	61	62
12	92	345	382	788	685	760	1050	594	1220	109	65	59
13	92	335	306	572	718	1090	858	499	1070	107	65	58
14	94	323	e280	407	645	984	736	481	981	108	64	56
15	102	314	e280	322	595	3180	2670	430	938	110	61	59
16	169	306	e270	304	571	7190	2510	306	899	117	60	67
17	148	298	e260	294	510	2860	1290	279	874	115	60	74
18	152	289	e260	283	429	1940	1040	275	842	104	69	222
19	139	283	e260	279	397	1550	945	265	820	95	87	369
20	122	278	e260	280	382	1580	812	260	805	89	77	377
21	118	274	e250	276	403	1560	675	255	918	85	67	270
22	128	271	e240	289	e700	1490	650	248	2140	81	59	184
23	e300	269	e240	276	e1000	1410	612	238	1040	77	56	152
24	e600	265	e230	258	e2000	e1500	478	231	634	74	59	135
25	e1100	261	e220	254	e9000	e1400	458	226	504	73	59	125
26	e8000	258	e240	255	2360	e1300	404	219	416	83	57	119
27	3310	257	e260	255	1840	e1200	371	219	281	651	57	114
28	1450	256	e280	290	1690	e1100	348	322	242	210	58	109
29	1170	257	e260	347		e960	328	539	224	138	56	105
30	1640	255	e240	450		823	312	586	213	114	54	102
31	905		e230	593		689		572		102	66	
MEAN	669	399	257	391	1101	1568	752	429	1144	140	65.5	116
MAX	8000	1260	382	961	9000	7190	2670	894	5770	651	91	377
MIN	69	255	220	220	323	689	312	219	213	73	54	56
AC-FT	41130	23730	15800	24050	61130	96380	44760	26390	68060	8590	4030	6910

07145500 NINNESCAH RIVER NEAR PECK, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	454 3170 1986 38.5 1940	445 2767 1980 80.9 1955	328 1032 1945 95.5 1957	328 1429 1949 81.5 1957	444 3027 1949 117 1967	650 3245 1973 104 1967	720 3568 1944 120 1972	838 4314 1993 91.4 1967	880 3813 1957 43.0 1956	497 3258 1948 18.3 1954	275 1397 1948 5.43 1956	442 2705 1977 3.24 1956
SUMMARY	STATIST	ICS	FOR 2	2000 CALEI	NDAR YEAR	F	OR 2001	WATER YEAR		WATER YE	ARS 1938	- 2001
	MEAN ANNUAL M			519			581			524 1234 158		1993 1966
HIGHEST LOWEST	DAILY ME	EAN AN		13000 43	Mar 24 Sep 21		9000 54	Feb 25 Aug 30		33700 .20	Sep	17 1957 3 1956
MAXIMUM MAXIMUM	SEVEN-DAY I PEAK FLO I PEAK STA CANEOUS LO	AGE		45	Sep 12		57 13900 15. 53	Aug 24 Oct 26 68 Oct 26 Aug 30		.34 38200 21.85 .20	May May	1 1956 17 1957 17 1957 3 1956
ANNUAL 10 PERC 50 PERC	RUNOFF (A ZENT EXCENT ZENT EXCENT ZENT EXCENT	AC-FT) EDS EDS		376600 1250 248 77			420900 1290 294 69	114g 50		379500 1030 242 77	БСР	330



07145700 SLATE CREEK AT WELLINGTON, KS

LOCATION.--Lat $37^{\circ}15^{\circ}00^{\circ}$, long $97^{\circ}24^{\circ}12^{\circ}$, in SE $^{1}/_{4}$ NE $^{1}/_{4}$ Se $^{1}/_{4}$ sec.22, T.32 S., R.1 W., Summer County, Hydrologic Unit 11030013, on right bank at upstream side of bridge on U.S. Highway 81, at south edge of Wellington.

DRAINAGE AREA.--154 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1954-66. Annual maximum, water years 1960-69. April 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,157.24 ft above sea level. Prior to Apr. 1, 1969, crest-stage gage at present site and at datum 3.0 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Satellite telemeter at station.

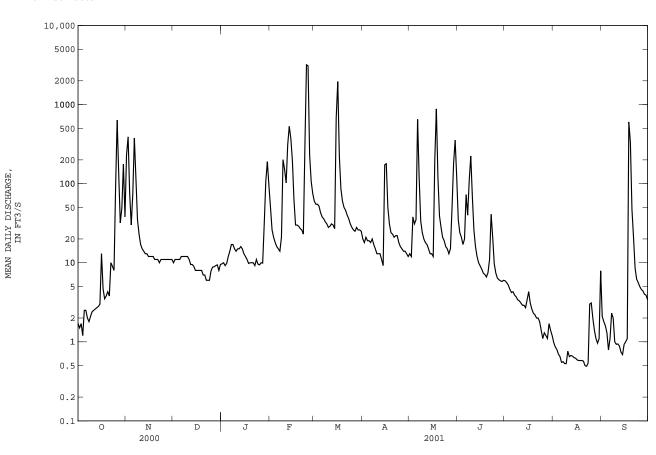
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	e	Discharge (ft ³ /s)	e Gag	e height (ft)		Date	Time	e	Discharge (ft ³ /s)		height
Feb 25 Mar 16	040 060		*5,040 2,850		21.15 18.71		May 18 Sep 18	030 190		1,840 1,190		.6.22 .3.53
		DISCHA	ARGE, CUBIC	C FEET PE		WATER YE MEAN VA	AR OCTOBER LUES	2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1.7 1.5 1.7 1.2 2.5	231 391 76 30 75	10 11 11 11 11	9.7 10 9.2 9.8 12	50 26 21 18 16	60 55 55 52 43	20 18 21 19	13 12 38 31 35	35 24 21 17 20	5.9 5.6 5.2 4.6 4.2	.98 .86 .80 .70	2.1 1.8 1.6 1.3
6 7 8 9 10	2.5 2.0 1.8 2.1 2.4	376 116 35 23 17	12 12 12 12 12	14 17 17 15 14	15 14 21 201 152	38 36 33 31 28	18 20 17 15	652 120 34 24 20	73 40 109 224 69	4.3 3.9 3.7 3.4 3.3	.55 .56 .53 .53	1.1 2.3 2.0 1.0
11 12 13 14 15	2.5 2.6 2.7 2.8 3.0	15 14 13 13	9.5 9.5 e9.0 e8.0	15 15 16 15 13	102 311 531 374 195	29 31 30 27 687	13 13 11 9.2 173	18 17 15 13	26 16 12 10 9.1	3.1 2.9 2.9 2.7 3.4	.65 .67 .66 .63	.94 .88 .74 .69
16 17 18 19 20	13 4.7 3.5 3.8 4.3	12 12 12 11 11	e8.0 e8.0 e8.0 e8.0 e7.0	12 11 9.8 10 e10	62 30 30 29 27	1960 223 86 60 50	179 50 31 24 23	12 203 883 121 39	8.3 7.4 7.1 6.6 7.5	4.3 3.1 2.6 2.3 2.2	.59 .58 .58 .58	1.0 1.1 604 333 47
21 22 23 24 25	3.8 10 9.0 8.0 88	11 10 11 11 11	e7.0 e6.0 e6.0 e6.0	10 9.2 11 9.6 9.4	26 23 303 3190 3090	46 40 36 31 28	21 22 22 18 16	28 21 19 16 15	11 41 21 9.7 7.4	2.0 2.0 1.8 1.4	.50 .49 .54 3.0 3.1	21 8.6 6.2 5.6 5.0
26 27 28 29 30 31	638 133 32 49 176 38	11 11 11 11 11	8.8 8.9 9.2 9.4 e8.0 9.5	10 9.9 31 108 190 94	233 107 75 	26 25 28 26 26 25	15 14 14 13 12	13 15 49 178 355 121	6.4 6.1 5.9 5.8 6.0	1.3 1.2 1.1 1.7 1.4	2.0 1.4 1.1 .96 1.1 7.9	4.6 4.4 4.0 3.9 3.4
MEAN MAX MIN AC-FT	40.2 638 1.2 2470	53.5 391 10 3180	9.25 12 6.0 569	24.1 190 9.2 1480	331 3190 14 18390	127 1960 25 7840	29.1 179 9.2 1730	101 883 12 6230	28.7 224 5.8 1710	2.90 5.9 1.1 178	1.13 7.9 .49 70	35.7 604 .69 2130

07145700 SLATE CREEK AT WELLINGTON, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG SEP
MEAN MAX (WY) MIN (WY)	41.6 318 1986 .32 1981	66.3 408 1999 .39 1981	30.0 229 2000 1.85 1989	27.5 116 1993 2.30 1981	59.6 331 2001 2.86 1981	137 739 1973 3.40 1991	88.5 477 1983 2.39 1981	101 1091 1993 3.14 1981	152 972 1995 .49 1972	65.1 369 1999 .17 1980	49.0 57.5 408 620 1977 1973 .40 .28 1978 1984
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	AR YEAR	FC	OR 2001 WAS	TER YEAR		WATER YEA	RS 1970 - 2001
HIGHEST	SUMMARY STATISTICS ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN			108			63.5			72.8 210 4.29	1993 1981
HIGHEST LOWEST	DAILY ME	EAN AN		4590 .94	Mar 24 Sep 20		3190 .49	Feb 24 Aug 22		10200	Jun 17 1975 Aug 21 1972
MAXIMUM MAXIMUM	SEVEN-DAY I PEAK FLO I PEAK STA	AGE		1.0	Sep 16		.55 5040 21.15 .42	Feb 25 Feb 25		.00 28500 25.82	Jul 10 1980 Jun 17 1975 Jun 17 1975 at times
ANNUAL 10 PERC 50 PERC	RUNOFF (A ENT EXCER ENT EXCER	AC-FT) EDS EDS		78460 172 12			45980 107 12	Aug 21		52770 74 8.1	at times
90 PERC	ENT EXCE	EDS		2.0			1.1			.92	



07146500 ARKANSAS RIVER AT ARKANSAS CITY, KS

LOCATION.--Lat $37^{\circ}03^{\circ}23^{\circ}$, long $97^{\circ}03^{\circ}32^{\circ}$, in NE $^1/_4$ NE $^1/_4$ NE $^1/_4$ sec.35, T.34 S., R.3 E., Cowley County, Hydrologic Unit 11030013, on left bank at downstream side of bridge on U.S. Highway 166, 0.5 mi west of Arkansas City, 5.4 mi upstream from Walnut River, and at mile 701.4.

WATER-DISCHARGE RECORDS

DRAINAGE AREA. --43,713 mi², of which 7,607 mi² is probably noncontributing.

PERIOD OF RECORD.--September 1902 to September 1906, September 1921 to current year. Published as "near Arkansas City" 1903-04. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1311: 1905. WSP 1341: 1922-23, 1927, 1929, 1931, 1933, 1940, 1945-46(M), drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,050.04 ft above sea level (levels by U.S. Army Corps of Engineers). Sept. 23, 1902, to July 31, 1906, nonrecording gage at site 0.5 mi upstream at datum 9.5 ft higher. Sept. 10, 1921, to Sept 27, 1929, nonrecording gage and Sept. 28, 1929, to Aug. 28, 1956, water-stage recorder at site 0.5 mi upstream at datum 2.97 ft higher than present datum.

REMARKS.--Records fair except those for estimated daily discahrges, which are poor. Flow slightly regulated since Oct. 1948 by John Martin Reservoir (station 07130000), and since 1964 by Cheney Reservoir (station 07144790). Diversions upstream from station for irrigation. Satellite telemeter at station.

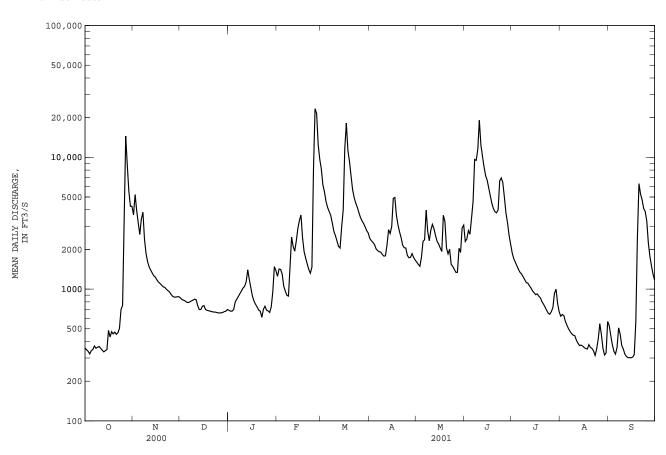
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft^3/s and maximum (*):

Date	Ti	.me	Discharge (ft ³ /s)	e Gag	ge height (ft)		Date	Tim	ie	Discharge (ft ³ /s)		height (ft)
Oct 27 Feb 25 Mar 17	23	00 00 00	16,900 *27,100 20,200	,	16.55 19.30 17.50		Jun 7 Jun 10	190 080		12,800 20,900		5.30 7.70
		DISCHA	ARGE, CUBIC	FEET PE		WATER YE Y MEAN V		R 2000 TO) SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	358	3660	857	e690	1250	8180	2420	1600	2300	1880	623	528
2	346	5220	832	e680	1420	6200	2330	1540	2400	1700	642	444
3	337	3960	823	e680	1410	5480	2260	1490	2780	1600	629	378
4	322	3170	813	e700	1300	4630	2180	1750	2610	1500	567	337
5	341	2600	794	e800	1050	4170	2020	2300	3440	1410	531	321
6	348	3410	791	e840	964	3890	1960	2370	4640	1340	500	361
7	370	3830	799	e880	897	3630	1920	3980	9630	1300	477	508
8	356	2390	814	e925	885	3190	1910	2740	9490	1240	459	455
9	362	1860	825	e970	1460	2750	1830	2330	11500	1180	447	374
10	367	1610	839	e1020	2480	2550	1780	2800	19100	1120	443	351
11	355	1470	831	1050	2110	2320	1790	3100	12400	1110	410	321
12	344	1390	e750	1140	1940	2110	2170	2870	10200	1060	389	308
13	334	1320	e700	1400	2310	2050	2820	2550	8440	1020	373	302
14	341	1260	e700	1180	2880	2950	2640	2300	7270	970	376	302
15	348	1230	e740	1020	3320	3990	2990	2200	6710	938	370	301
16	486	1170	e750	882	3650	11600	4880	2050	5850	907	360	305
17	433	1130	e700	809	2460	18200	4960	1930	5100	920	354	319
18	475	1100	e690	766	1930	11300	3640	3630	4470	883	351	568
19	457	1070	e685	731	1720	9320	3070	3260	4080	858	379	2440
20	472	1040	e680	692	1550	7230	2720	2050	3860	803	361	6320
21	454	1030	e675	680	1410	5680	2460	1850	3800	769	354	5270
22	466	996	e670	611	1320	4950	2150	2010	3990	730	339	4770
23	503	974	e670	702	1470	4500	2060	1540	6620	690	314	4100
24	700	950	e665	742	8050	4180	2050	1490	6980	657	353	3880
25	753	911	e660	693	23400	3810	1800	1410	6430	644	420	3290
26 27 28 29 30 31	3240 14500 8740 5540 4250 4250	882 869 870 875 875	e660 e660 e665 e675 e680 e700	683 665 732 955 1480 1380	21500 12500 9690 	3500 3300 3150 2970 2780 2660	1730 1740 1860 1740 1660	1340 1340 2040 1900 2910 3060	4980 3780 3190 2560 2190	674 724 929 999 782 673	546 452 355 316 328 567	2240 1770 1500 1300 1170
MEAN	1643	1771	735	877	4154	5072	2385	2249	6026	1033	432	1494
MAX	14500	5220	857	1480	23400	18200	4960	3980	19100	1880	642	6320
MIN	322	869	660	611	885	2050	1660	1340	2190	644	314	301
AC-FT	101100	105400	45210	53910	230700	311800	141900	138300	358600	63490	26550	88930

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MA	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	1650 18890 1974 19.6 1922	1428 11550 1999 8.27 1922	987 3908 1945 18.2 1922	897 3673 1949 84.1 1922	1264 9658 1949 41.6 1923	2036 14600 1973 36.9 1923	2379 14780 1944 118 1923	3016 16890 1993 334 1965	16040 1923 248	2661 17190 1951 112 1934	1627 13320 1950 65.4 1934	1560 7870 1951 32.4 1956
SUMMARY	STATIST	ICS	FOR 2	2000 CALEI	NDAR YEAR		FOR 2001	WATER Y	AR	WATER Y	EARS 1903	3 - 2001
	MEAN CANNUAL I ANNUAL M			2482			2301			1932 5830 366		1951 1934
	DAILY M			37700	Mar 25		23400	Feb		79700	Nov	3 1998
	DAILY ME			294	Sep 20		301	Sep		4.0		23 1921
MAXIMUN MAXIMUN	SEVEN-DA 1 PEAK FL 1 PEAK ST TANEOUS L	AGE		303	Sep 16		308 27100 19 292		25 25	5.6 103000 28.8 1.0	Jun 39 Nov	5 1921 10 1923 3 1998 9 1921
ANNUAL 10 PERC	RUNOFF (.	AC-FT) EDS	- -	1802000 5660			1666000 4950	Sep	14	1399000 4080) OCC	9 1921
	CENT EXCE			1140 412			1300 369			914 280		



07146500 ARKANSAS RIVER AT ARKANSAS CITY, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. -- Water years 1952 to June 1988, 2000 to current year.

PERIOD OF DAILY RECORD. -- September 1961 to September 1975.

REMARKS.--Unpublished records of intermittent sediment samples are available on the Internet at http://ks.water.usgs.gov/nwis. Sediment samples are collected only at selected flow conditions.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)
FEB 26 JUN 18	1345 1040	19200 4420	270 913	7.8 8.3	6.1	2000	104000 3790	56 	56 	58	60 	65 	69

	SED.	SED.	SED.	SED.
	SUSP.	SUSP.	SUSP.	SUSP.
	FALL	FALL	FALL	FALL
	DIAM.	DIAM.	DIAM.	DIAM.
	% FINER	% FINER	% FINER	% FINER
DATE	THAN	THAN	THAN	THAN
	.125 MM	.250 MM	.500 MM	1.00 MM
	(70343)	(70344)	(70345)	(70346)
FEB				
26	72	91	99	100
JUN	, 2	71	,,,	100
18				

07147070 WHITEWATER RIVER AT TOWANDA, KS

LOCATION.--Lat $37^{\circ}47^{\circ}45^{\circ}$, long $97^{\circ}00^{\circ}45^{\circ}$, in SE $^{1}/_{4}$ SW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.8, T.26 S., R.4 E., Butler County, Hydrologic Unit 11030017, on right bank at downstream side of bridge on Kansas Highway 254, 0.5 mi west of Towanda, 2.4 mi downstream from West Branch, and at mile 17.5.

DRAINAGE AREA. -- 426 mi².

PERIOD OF RECORD.--Annual maximum, water years 1960-61. October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,231.47 ft above sea level (levels by Kansas State Highway Commission). Prior to Oct. 1, 1961, crest-stage gage at same site at datum 5.22 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.---Flood of April 1944 reached a stage of 28.6 ft from floodmark.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

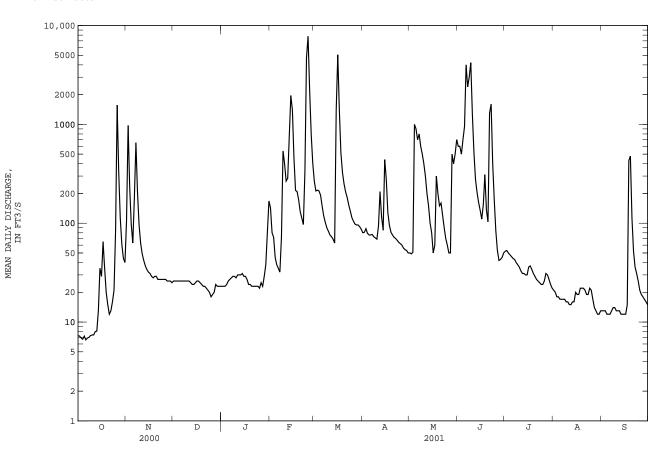
Date	Tin	ne	Discharge (ft ³ /s)	e Gag	e height (ft)		Date	Tim	e	Discharge (ft ³ /s)		height ft)
Oct 26 Feb 14 Feb 25 Mar 16	unkr)0 nown	2,110 2,260 *11,300 6,370	*	9.78 10.25 23.23 19.99		Jun 6 Jun 9 Jun 22	140 120 030	10	5,360 4,950 2,660	1'	3.18 7.18 1.26
		DISCH	ARGE, CUBIC	FEET PE		WATER YE Y MEAN V		R 2000 TC	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	106	26	23	143	267	80	50	e600	e52	21	13
2	7.2	976	26	23	80	212	81	49	e600	53	20	13
3	6.9	236	26	23	72	216	88	51	e500	50	18	13
4	6.7	98	26	24	45	212	79	e1000	e700	48	18	12
5	7.2	63	26	26	38	192	76	e900	e950	46	17	12
6	6.6	180	26	27	35	149	76	e700	e4000	44	17	12
7	6.9	652	26	28	32	119	77	e800	e2400	43	17	13
8	7.0	206	26	29	72	102	73	e600	e3000	40	17	14
9	7.3	97	26	29	538	90	71	e500	4210	38	16	14
10	7.4	63	26	28	400	83	69	e400	1290	e36	16	13
11	7.4	49	26	30	267	76	93	e300	e529	33	15	13
12	8.0	42	e25	30	285	73	209	e200	e278	31	15	13
13	8.1	37	24	30	757	69	116	e150	205	31	16	12
14	13	34	24	31	1960	63	85	e100	162	30	16	12
15	35	32	25	29	1400	1400	440	e80	135	30	20	12
16	29	31	26	29	452	e5060	279	e50	110	36	19	12
17	65	29	e26	27	215	1400	128	e60	154	37	19	15
18	35	28	25	24	209	514	95	e300	310	34	22	431
19	20	29	24	e24	172	326	81	e200	136	31	22	478
20	15	29	23	e23	131	250	76	e150	103	29	22	113
21	12	27	23	23	113	208	72	e160	1300	27	21	52
22	13	27	22	23	97	182	70	e120	1600	26	19	36
23	16	27	21	23	334	153	67	e90	401	25	19	31
24	21	27	e20	23	e4690	133	64	e70	172	24	22	26
25	84	27	e18	22	e7780	114	62	e60	84	24	21	21
26 27 28 29 30 31	1570 329 112 61 44 40	27 26 26 26 25	e19 e20 e24 23 23	25 23 29 38 e80 168	2270 801 406 	105 98 96 96 92 87	60 56 54 53 50	e50 e50 e500 e400 e500 e700	53 42 e43 e45 e50	26 31 30 27 24 22	17 14 13 12 12	19 18 17 16 15
MEAN	84.1	109	24.0	32.7	850	395	99.3	301	805	34.1	17.6	49.7
MAX	1570	976	26	168	7780	5060	440	1000	4210	53	22	478
MIN	6.6	25	18	22	32	63	50	49	42	22	12	12
AC-FT	5170	6510	1480	2010	47200	24270	5910	18530	47930	2100	1080	2960

arkansas river basin 429

07147070 WHITEWATER RIVER AT TOWANDA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	161 1797 1986 .74 1992	209 3494 1999 2.34 1981	99.9 508 1993 4.34 1967	66.9 401 1962 6.20 1967	146 850 2001 5.31 1967	244 1933 1973 4.77 1967	250 1123 1999 8.29 1967	328 2097 1995 3.55 1967	529 2467 1995 10.4 1972	219 1210 1993 6.35 1980	108 1436 1995 4.24 1966	124 1599 1965 1.11 1980
SUMMARY	STATIST:	ICS	FOR 2	2000 CALEN	DAR YEAR	FC	OR 2001 WA	TER YEAR		WATER YEA	RS 1962	- 2001
LOWEST HIGHEST LOWEST ANNUAL	ANNUAL MANNUAL	EAN EAN AN Y MINIMUM		122 3280 5.7 6.1	Mar 24 Sep 19 Sep 13		7780 6.6 6.9	Feb 25 Oct 6 Oct 2		207 682 21.3 49400 .30 .47	Oct 20	1999 1981 1 1998 0 1972 0 1991
MAXIMUM	I PEAK FLO I PEAK STA CANEOUS LO	AGE					11300 23.23 6.5	Feb 25 Feb 25 Oct 3		80600 30.54 .20	Nov	1 1998 1 1998 4 1966
10 PERC 50 PERC	RUNOFF (A ENT EXCENT ENT EXCENTENTE	EDS EDS		88870 247 42 8.8			165100 500 38 14			149800 249 36 7.8		



Discharge

07147800 WALNUT RIVER AT WINFIELD, KS

LOCATION.--Lat $37^{\circ}13^{\circ}27^{\circ}$, long $96^{\circ}59^{\circ}40^{\circ}$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ NE $^{1}/_{4}$ sec.33, T.32 S., R.4 E., Cowley County, Hydrologic Unit 11030018, on left bank at upstream side of bridge on U.S. Highway 77, 1.0 mi south of Winfield, 1.0 mi upstream from Black Crook Creek, and at mile 25.4.

WATER-DISCHARGE RECORDS

DRAINAGE AREA. -- 1,880 mi².

PERIOD OF RECORD.--October 1921 to current year. October to November 1921 monthly discharge only, published in WSP 1311.

REVISED RECORDS.--WSP 607: 1923(M). WDR KS-82-1: Drainage area. WSP 1241: 1922(M), 1923, 1926-27, 1928-29(M), 1934, 1940-41.

GAGE.--Water-stage recorder. Datum of gage is 1,082.86 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to Oct. 1, 1934, nonrecording gage on upstream side of former bridge just upstream from present gage at same datum.

REMARKS.--Records good. Some regulation at low flow by City Water Works Dam and Timber Creek Reservoir upstream from station. Flow moderately regulated since 1981 by El Dorado Lake (station 07146622). Satellite telemeter at station.

PEAK DISCHARGES GREATER THAN BASE FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,600 ft^3/s and maximum (*): Gage Gage Discharge height Discharge height Date Time (ft^3/s) (ft) Date Time (ft^3/s) (ft) Dec. 10 1500 13,300 15.34 June 27 2400 *18,100 *18.75 Feb. 26 1400 13,800 15.67

Discharge

Gage height

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,600 ${\rm ft}^3/{\rm s}$ and maximum (*):

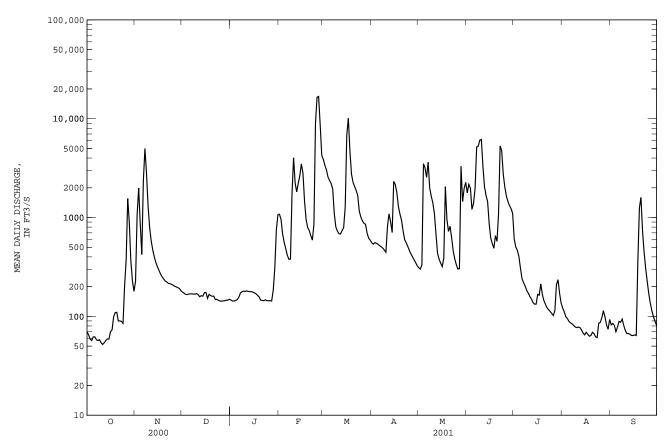
Gage height

Date	Tiı	me	(ft ³ /s)	. Gas	(ft)		Date	Tim	ne	(ft ³ /s)		(ft)
Feb 25	24	00	*18,100	;	*18.73		Mar 17	040	00	11,000	1	3.55
		DISCHA	RGE, CUBIC	FEET PI		WATER YI Y MEAN V	EAR OCTOBEF ALUES	2000 TO) SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	226	176	146	1080	3880	554	311	1780	608	121	82
2	65	1060	172	143	953	3380	538	301	2170	503	111	85
3	59	1990	167	143	681	3040	557	332	1980	467	99	81
4	57	870	166	145	560	2570	549	3500	1210	403	95	70
5	62	422	168	148	485	2370	535	3190	1390	306	89	78
6	62	2360	169	156	416	2210	520	2550	1970	241	86	89
7	58	4990	169	172	378	1950	506	3630	5170	219	84	87
8	57	2830	168	178	379	1100	491	1990	5260	202	81	94
9	58	1320	168	180	1730	803	468	1640	6060	183	78	81
10	54	795	170	179	4020	730	446	1410	6170	172	77	72
11	52	581	166	181	2230	687	810	1100	3310	159	78	67
12	54	471	158	179	1820	682	1090	682	2060	150	77	67
13	57	399	162	178	2220	737	908	436	1670	138	73	66
14	59	350	160	178	2660	792	706	379	1450	133	68	64
15	59	317	174	176	3490	1280	2320	346	868	133	65	64
16	70	291	175	173	2800	6830	2160	319	619	167	69	65
17	73	268	152	169	1470	10100	1780	388	545	164	66	64
18	99	251	167	163	956	4750	1290	2050	489	213	63	352
19	109	239	162	157	791	2760	1080	961	656	166	64	1250
20	110	228	160	146	741	2270	939	723	575	144	69	1600
21	90	222	160	145	658	2060	733	817	1100	132	67	738
22	90	216	148	144	591	1880	596	628	5300	122	62	447
23	89	214	149	147	851	1670	556	460	4760	117	61	308
24	85	211	145	144	8970	1160	510	382	2750	112	85	226
25	203	207	143	144	16500	1010	465	334	2040	107	87	170
26 27 28 29 30 31	368 1560 897 368 230 179	202 199 195 192 182	143 143 144 146 146 149	144 143 184 308 754 1070	16800 8680 4270 	923 875 853 695 617 590	429 401 374 350 326	301 304 3300 1450 1970 2270	1650 1450 1320 1230 1100	102 115 210 235 171 136	97 114 99 82 74 93	135 114 99 89 81
MEAN	178	743	160	213	3114	2105	766	1240	2270	207	81.7	230
MAX	1560	4990	176	1070	16800	10100	2320	3630	6170	608	121	1600
MIN	52	182	143	143	378	590	326	301	489	102	61	64
AC-FT	10920	44230	9810	13120	172900	129400	45590	76270	135100	12750	5030	13660

07147800 WALNUT RIVER AT WINFIELD, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN 696 736 MAX 6877 11710 (WY) 1987 1999 MIN .000 .84 (WY) 1957 1957	428 354 3313 2633 1945 1949 4.12 4.33 1957 1957	533 3631 1949 7.10 1957	979 8777 1973 8.73 1957	1370 10080 1944 8.87 1955	1512 10320 1993 4.50 1956	1835 11710 1995 23.9 1933	973 9335 1951 3.90 1936	462 4492 1950 .000 1936	571 4782 1965 .000 1954
SUMMARY STATISTICS	FOR 2000 CAL	ENDAR YEAR	FOI	R 2001 W.	ATER YEAR		WATER YEA	RS 1922 -	2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS	913 15900 47 51 662800 2720 244 71	Jun 27 Sep 21 Sep 15	(924 16800 52 56 18100 18.7 51 668800 2270 291 73	Feb 26 Oct 11 Oct 7 Feb 25 3 Feb 25 Oct 11		870 2948 26.2 85200 .00 105000 38.30 .00 630500 1670 169 22	Nov 11 Jul 27 Apr 23 Apr 23	1936 1944



07147800 WALNUT RIVER AT WINFIELD, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. -- Water years 1960 to June 1985, 2000 to current year.

PERIOD OF DAILY RECORD.--September 1961 to September 1975.

REMARKS.--Unpublished records of intermittent sediment samples are available on the Internet at http://ks.water.usgs.gov/nwis. Sediment samples are collected only at selected flow conditions.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)
FEB 26	1110	17100	195	7.7	5.3	966	44600	76	80	83	86	95	99
MAY 30	1010	2130	342	7.5	19.5	570	3280						
JUN 08	1135	4800	286	7.6	22.0	1120	14500						

DATE	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
FEB 26 MAY	(70343) 99	(70344) 99	100	100
30 JUN 08				

07149000 MEDICINE LODGE RIVER NEAR KIOWA, KS

LOCATION.--Lat $37^{\circ}02^{\circ}17^{\circ}$, long $98^{\circ}28^{\circ}04^{\circ}$, in SE $^{1}/_{4}$ SW $^{1}/_{4}$ sec.36, T.34 S., R.11 W., Barber County, Hydrologic Unit 11060003, on right bank at downstream side of bridge on Kansas Highway 14, 200 ft downstream from the Atchison, Topeka and Santa Fe Railway Co. bridge, 1.5 mi northeast of Kiowa, and at mile 22.2.

DRAINAGE AREA. -- 903 mi².

PERIOD OF RECORD.--May 1895 to October 1896, October 1937 to September 1950, October 1954 to September 1955, June 1959 to current year. Published as Medicine River near Kiowa 1895-96. All figures of discharge above 2,000 ft³/s for June and July 1896, published in Eighteenth Annual Report of the Geological Survey (Part 4), have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1391: 1938(M), 1942(M). WSP 1921: Drainage area. See also "PERIOD OF RECORD."

GAGE.--Water-stage recorder. Datum of gage is 1,286.99 ft above sea level (levels by U.S. Army Corps of Engineers). May 1895 to October 1896, nonrecording gage at site 2.0 mi upstream at different datum. Feb. 11 to Mar. 2, 1938, nonrecording gage and Mar. 3, 1938, to Sept. 30, 1944, water-stage recorder at present site and datum 3.00 ft higher. Oct. 1, 1944, to Sept. 30, 1950, and Oct. 1, 1954, to Sept. 30, 1955, water-stage recorder at present site and datum.

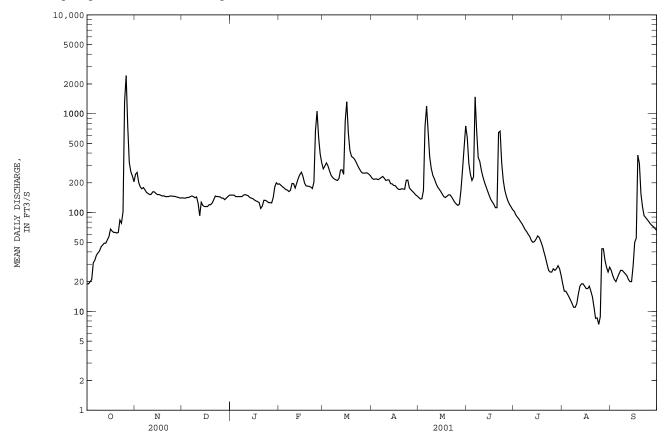
REMARKS.--Records fair except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of May 8, 1922, and June 1957 reached stages of about 16 ft and 15.5 ft, respectively, present site and datum, from the Atchison, Topeka and Santa Fe Railway Co. records and information by local resident

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 26	0400	*2.950	*6.89	No peak o	greater than	base discharge.	

No peak greater than base discharge.



07149000 MEDICINE LODGE RIVER NEAR KIOWA, KS--Continued

e Estimated

07151500 CHIKASKIA RIVER NEAR CORBIN, KS

LOCATION.--Lat $37^{\circ}07^{\circ}44^{\circ}$, long $97^{\circ}36^{\circ}04^{\circ}$, in NW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.36, T.33 S., R.3 W., Summer County, Hydrologic Unit 11060005, on right bank at downstream side of bridge on Kansas Highway 49, 1 mi upstream from Prairie Creek, 3 mi west of Corbin, and at mile 67.5.

DRAINAGE AREA. -- 794 mi².

PERIOD OF RECORD.--August 1950 to September 1965, October 1975 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,108.00 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to Mar. 23, 1951, wire-weight gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Satellite telemeter at station.

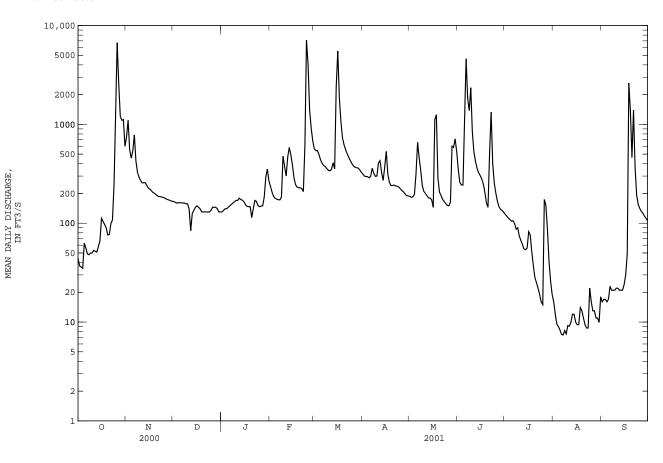
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ${\rm ft}^3/{\rm s}$ and maximum (*):

Date	Ti	me	Discharge (ft ³ /s)	e Gag	e height (ft)		Date	Time	e	Discharge (ft ³ /s)		height (ft)
Oct 26 Feb 24 Mar 16 May 17	16 20 05 22	00 00	9,680 *10,700 7,510 4,290	*	12.24 12.76 11.03 8.66		Jun 6 Jun 9 Sep 18 Sep 21	070 050 170 070	0 0	5,970 3,330 4,870 3,140	1	10.06 7.73 9.18 7.53
		DISCHA	ARGE, CUBIO	C FEET PE		WATER YE Y MEAN VA		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	44 37 36 35 63	744 1100 552 456 541	166 163 160 161 161	e130 e135 e140 e140 e145	236 206 186 179 175	567 542 544 495 437	315 300 297 296 288	187 183 185 196 316	350 259 244 243 1060	123 118 113 109 105	16 12 9.5 9.0 8.3	16 17 17 16 17
6 7 8 9 10	56 49 48 50 50	782 425 327 291 271	161 160 160 157 157	e150 e155 e160 e165 e170	173 172 184 477 376	403 385 373 357 343	298 360 320 298 300	658 461 344 241 210	4620 1840 1380 2350 840	106 99 87 90 74	7.5 7.4 8.2 7.6 9.2	23 21 21 21 22
11 12 13 14 15	53 52 51 58 66	256 257 257 240 226	139 84 e125 e135 e145	e170 179 174 171 165	300 466 584 493 391	339 352 409 355 2390	408 430 325 271 372	e200 e190 e180 e180 172	527 422 360 324 304	67 61 55 54 56	9.1 10 12 12 10	22 21 21 21 24
16 17 18 19 20	112 104 97 90 76	221 212 204 200 193	e150 e145 e140 e130 e130	154 148 147 147 114	288 246 232 229 228	5530 1870 1070 733 622	533 313 258 240 241	145 1120 1250 287 206	281 250 206 161 145	82 76 51 37 28	9.4 9.4 14 13	30 49 2620 1380 462
21 22 23 24 25	77 99 108 243 1230	188 186 185 183 181	e130 e130 e130 e130 e135	140 170 166 151 147	224 209 620 7110 4070	554 505 465 430 401	243 238 237 232 223	191 174 166 158 151	501 1330 401 255 202	25 22 19 16 15	9.4 8.7 8.7 22 16	1390 367 193 155 141
26 27 28 29 30 31	6720 2610 1210 1100 1120 598	177 174 172 169 167	e145 e145 e145 e140 e130 e130	149 150 184 292 353 267	1400 916 681 	381 369 364 362 348 328	214 208 198 190 189	150 163 602 585 713 530	167 147 138 135 129	174 151 86 41 26 19	13 13 11 11 9.9	132 126 118 112 106
MEAN MAX MIN AC-FT	527 6720 35 32410	318 1100 167 18920	143 166 84 8770	169 353 114 10370	752 7110 172 41750	730 5530 328 44870	288 533 189 17130	339 1250 145 20810	652 4620 129 38820	70.5 174 15 4330	11.1 22 7.4 685	256 2620 16 15240

07151500 CHIKASKIA RIVER NEAR CORBIN, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	223 1894 1986 .000 1957	245 1923 1999 .000 1957	134 467 1998 13.7 1955	123 365 1998 15.4 1957	175 752 2001 30.3 1957	337 1907 2000 32.0 1955	288 1184 1999 26.9 1955	490 2690 1993 24.0 1956	460 2055 1951 12.9 1953	249 1496 1951 .80 1954	112 428 1997 .000 1956	195 1172 1977 .000 1956
SUMMARY	STATIST:	ICS	FOR :	2000 CALE	NDAR YEAR	F	OR 2001 WA	TER YEAR		WATER YE	ARS 1951	- 2001
	MEAN ANNUAL M			424			351			253 609 40.0		1951 1954
	DAILY M			16000	Mar 24		7110	Feb 24		27800		L1 1985
	DAILY MEA			32	Sep 15		7.4	Aug 7		.00		27 1953
	SEVEN-DAY I PEAK FLO	Y MINIMUM		33	Sep 10		8.2 10700	Aug 4 Feb 24		.00 39300		L6 1953 L1 1985
	I PEAK FLO						12.76			22.90		1 1985
	CANEOUS LO						5.6	Aug 9		.00		times
ANNUAL	RUNOFF (A	AC-FT)		308100			254100	_		183100		
10 PERC	CENT EXCE	EDS		766			600			436		
50 PERC	CENT EXCE	EDS		145			173			95		
90 PERC	CENT EXCE	EDS		47			18			19		



07155590 CIMARRON RIVER NEAR ELKHART, KS

LOCATION.--Lat $37^{\circ}07'30"$, long $101^{\circ}53'50"$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.4, T.34 S., R.42 W., Morton County, Hydrologic Unit 11040002, Cimarron National Grasslands, on left bank at downstream side of bridge on Kansas Highway 27, 8.0 mi north of Elkhart, and at mile 499.4.

DRAINAGE AREA.--2,899 mi^2 , of which 483 mi^2 does not contribute directly to surface runoff.

PERIOD OF RECORD. -- April 1971 to current year.

REVISED RECORDS. -- WDR KS-84-1: 1983.

GAGE.--Water-stage recorder. Datum of gage is 3,381.89 ft above sea level.

REMARKS.--Records fair. Satellite telemeter at station.

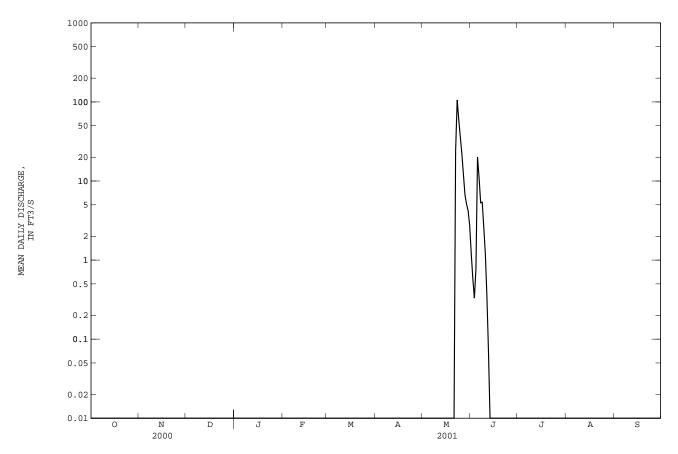
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ${\rm ft}^3/{\rm s}$ and maximum (*):

Date	Time	е	Discharge (ft ³ /s)	Gage	e height (ft)		Date	Time	ı.	oischarge (ft ³ /s)		height (ft)
May 23	004	5	*127	1	*6.28		No peak	greater	than base	discharge.		
		DISCHA	ARGE, CUBIC	FEET PER		WATER YEA Y MEAN VAL		2000 TO	SEPTEMBER	2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	1.2 .58 .33 .79	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
6 7 8 9 10	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	11 5.3 5.4 2.6 1.2	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
11 12 13 14 15	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.35 .07 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
16 17 18 19 20	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
21 22 23 24 25	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00	.00 24 106 60 36	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
26 27 28 29 30 31	.00 .00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00 .00	.00 .00 .00 .00 .00	.00 .00 .00	.00 .00 .00 .00 .00	.00 .00 .00 .00	22 12 6.6 5.1 4.2 2.7	.00	.00 .00 .00 .00 .00	.00 .00 .00 .00	.00 .00 .00 .00
MEAN MAX MIN AC-FT	.000 .00 .00	.000	.000	.000 .00 .00	.000	.000	.000 .00 .00	8.99 106 .00 553	1.63 20 .00 97	.000 .00 .00	.000	.000

07155590 CIMARRON RIVER NEAR ELKHART, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	.057 1.12 1974 .000 1972	.057 1.52 1998 .000 1972	.24 6.88 1998 .000 1972	.38 10.3 1998 .000 1972	.28 7.06 1998 .000 1972	.67 16.9 1998 .000 1972	6.27 107 1977 .000 1972	34.8 519 1977 .000 1985	28.2 368 1978 .000 1983	13.3 113 1977 .000 1974	31.5 239 1997 .000 1978	7.84 102 1973 .000 1972
SUMMARY	STATIST	ICS	FOR :	2000 CALENI	AR YEAR	FC	OR 2001 WA	TER YEAR		WATER YEA	RS 1972	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM INSTANT	ANNUAL M ANNUAL ME DAILY ME SEVEN-DAY PEAK FLO PEAK STA ANEOUS LO	EAN EAN AN Y MINIMUM DW AGE DW FLOW		.020 .08 .00 .00	Feb 28 Jan 1 May 10		.90 106 .00 .00 127 6.28	May 23 Oct 1 Oct 1 May 23 May 23		10.4 82.6 .000 6190 .00 .00 21500 9.17 .00	May 2 Oct Oct May 2 May 2	1977 1985 26 1977 1 1971 1 1971 26 1977 26 1977 2 years
10 PERC	RUNOFF (<i>F</i> ENT EXCER ENT EXCER ENT EXCER	EDS EDS		.08 .00 .00			649 .00 .00			7510 1.4 .00 .00		



07157500 CROOKED CREEK NEAR ENGLEWOOD, KS

LOCATION.--Lat $37^{\circ}01^{\circ}54^{\circ}$, long $100^{\circ}12^{\circ}29^{\circ}$, in SE $^{1}/_{4}$ NW $^{1}/_{4}$ sec.1, T.35 S., R.27 W., Meade County, Hydrologic Unit 11040007, on right bank at downstream side of county highway bridge, 11.5 mi west of Englewood, and at mile 14.0.

DRAINAGE AREA.--1,157 mi^2 , of which 344 mi^2 is probably noncontributing.

PERIOD OF RECORD.--August 1942 to current year. Published as "near Nye" August 1942 to September 1995. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1211: 1950. WSP 1311: 1949(M).

Discharge

GAGE.--Water-stage recorder. Datum of gage is 2,163.79 ft above sea level. Prior to Sept. 12, 1942, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Extensive diversion for irrigation upstream from station. Satellite telemeter at station.

Discharge

Gage height

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft^3/s and maximum (*):

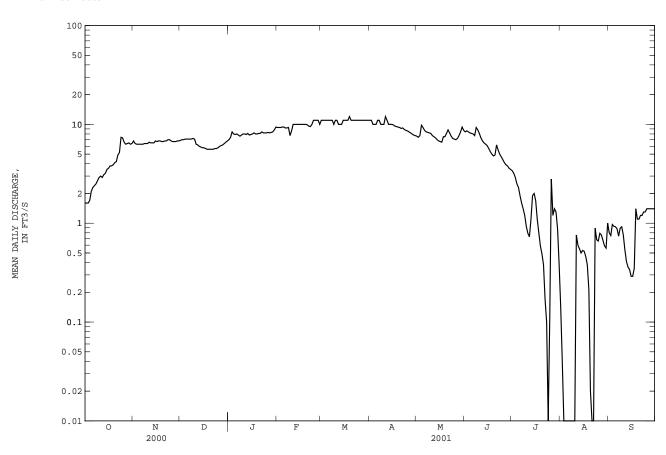
Gage height

Date	Tin	ne	(ft ³ /s)		(ft)		Date	Time	è	(ft ³ /s)	dage	(ft)
Dec 15	120	00	*19		*2.22		No peak	greater	than bas	se discharge.		
		DISCHA	RGE, CUBIC	C FEET PE		WATER YEA Y MEAN VAI	AR OCTOBER LUES	2000 TO	SEPTEMBE	R 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1.6 1.6 1.6 1.7 2.1	6.8 6.4 6.3 6.3	e6.9 e7.0 e7.0 e7.1 7.1	e7.0 e7.4 8.4 8.0 7.9	9.3 9.3 9.3 9.4 9.4	11 11 11 11	11 11 10 10	7.6 7.4 7.7 9.8 9.3	8.4 8.6 8.4 8.2 8.1	3.4 3.2 2.9 2.5 2.3	.14 .04 .00 .00	.80 .75 .97 .93
6 7 8 9 10	2.3 2.4 2.5 2.7 2.9	6.3 6.4 6.4 6.4	7.1 7.1 7.1 7.2 7.1	8.0 7.8 7.6 7.8 8.0	9.2 9.2 9.3 7.7 8.6	11 11 11 10 11	11 11 10 10	8.7 8.4 8.3 8.2 8.1	8.0 7.7 9.3 8.8 8.1	1.9 1.6 1.4 1.2	.00 .00 .00 .00	.88 .74 .89 .92 .76
11 12 13 14 15	3.0 2.9 3.1 3.2 3.5	6.6 6.5 6.5 6.8	6.3 e6.2 e6.0 e5.9 e5.8	8.0 7.9 8.1 7.8 7.9	e10 10 10 10 10	11 10 10 10	12 11 10 10	7.7 7.5 7.3 7.0 6.8	7.3 6.8 6.5 6.3	.79 .73 1.1 1.9 2.0	.76 .60 .55 .50	.54 .41 .36 .34 .29
16 17 18 19 20	3.6 3.8 3.8 3.9 4.1	6.7 6.8 6.8 6.7	e5.8 e5.7 e5.6 e5.6	8.0 8.2 8.0 e8.0 8.1	10 10 10 10 9.9	11 11 11 12 11	9.9 9.6 9.5 9.4 9.3	6.7 6.6 7.5 7.5 8.1	5.7 5.3 5.0 4.8 4.9	1.7 1.1 .80 .59	.52 .46 .38 .21	.29 .35 1.4 1.1
21 22 23 24 25	4.2 4.9 5.2 7.4 7.3	6.8 6.8 7.0 7.0 6.8	e5.6 e5.6 e5.7 e5.7 e5.8	e8.1 8.4 8.2 8.2 8.2	9.6 9.5 10 11	11 11 11 11 11	9.1 9.2 8.9 8.7 8.6	8.8 8.2 7.6 7.2 7.1	6.2 5.5 5.0 4.7 4.4	.38 .17 .10 .00	.00 .00 .89 .68	1.2 1.2 1.3 1.3
26 27 28 29 30 31	6.6 6.3 6.4 6.5 6.3	6.7 6.7 6.7 e6.8 e6.8	e6.0 e6.1 e6.2 e6.4 e6.6 e6.8	8.3 8.2 e8.3 e8.4 e8.8	11 11 10 	11 11 11 11 11	8.4 8.2 8.0 7.8 7.7	7.0 7.2 7.7 8.4 9.4 8.7	4.1 3.9 3.8 3.6 3.5	2.8 1.2 1.4 1.3 .87	.79 .76 .67 .59 .56	1.4 1.4 1.4 1.4
MEAN MAX MIN AC-FT	3.99 7.4 1.6 246	6.62 7.0 6.3 394	6.31 7.2 5.6 388	8.08 9.4 7.0 497	9.78 11 7.7 543	10.9 12 10 670	9.64 12 7.7 574	7.85 9.8 6.6 483	6.23 9.3 3.5 371	1.33 3.4 .00 82	.36 1.0 .00 22	.94 1.4 .29 56

07157500 CROOKED CREEK NEAR ENGLEWOOD, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2001, BY WATER YEAR (WY)

DEC JAN	FEB N	MAR APR	MAY	JUN JU	JL AUG	SEP
14.4 15.4 32.6 34.1 1974 1954 6.25 6.05 1995 1989	74.9 5 1949 19 6.90 7.	528 582 973 1973 .98 6.91	73.2 1233 1955 3.71 1956	325 37 1949 195 .60 .00	75 453 50 1950 00 .000	224 1950 .000
FOR 2000 CALENDA	AR YEAR	FOR 2001 WAT	ER YEAR	WATE	ER YEARS 19	43 - 2001
7.20		5.97				1951 2001
21 .19 27	Mar 24 Sep 11	12 .00	Mar 19 Jul 24 Aug 3	1270	.00 Ju	y 20 1955 il 23 1943 il 23 1943
.27	БСР 0	19 2.22	Dec 15 Dec 15	1360	00 Ma 9.00 Au	y 20 1955 g 31 1963 nost years
5230 12 6.7		4330 11 6.8	200 1	3	20 32 12	ioso years
	14.4 15.4 32.6 34.1 1974 1954 6.25 6.05 1995 1989 FOR 2000 CALEND 7.20 21 .19 .27	14.4 15.4 17.2 2 32.6 34.1 74.9 1974 1954 1949 1 6.25 6.05 6.90 7 1995 1989 1989 1 FOR 2000 CALENDAR YEAR 7.20 21 Mar 24 .19 Sep 11 .27 Sep 6	14.4 15.4 17.2 26.8 38.9 32.6 34.1 74.9 528 582 1974 1954 1949 1973 1973 6.25 6.05 6.90 7.98 6.91 1995 1989 1989 1992 1956 FOR 2000 CALENDAR YEAR FOR 2001 WAT 7.20 5.97 21 Mar 24 12 .19 Sep 11 .00 .27 Sep 6 .00 19 2.22 .00 5230 4330 12 6.7 6.8	14.4 15.4 17.2 26.8 38.9 73.2 32.6 34.1 74.9 528 582 1233 1974 1954 1949 1973 1973 1955 6.25 6.05 6.90 7.98 6.91 3.71 1995 1989 1989 1992 1956 1956 1956 FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR 7.20 5.97 21 Mar 24 12 Mar 19 .19 Sep 11 .00 Jul 24 .27 Sep 6 .00 Aug 3 19 Dec 15 .2.22 Dec 15 .00 Dec 1 4330 12 6.7 6.8	14.4 15.4 17.2 26.8 38.9 73.2 40.1 34. 32.6 34.1 74.9 528 582 1233 325 37. 1974 1954 1949 1973 1973 1955 1949 1956.25 6.05 6.90 7.98 6.91 3.71 .60 .00. 1995 1989 1989 1992 1956 1956 1956 1956 FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATE 7.20 5.97 3.7 21 Mar 24 12 Mar 19 1270 .19 Sep 11 .00 Jul 24 .27 Sep 6 .00 Aug 3 19 Dec 15 1360 2.22 Dec 15 .00 Dec 1 5230 4330 2182 11 6.7 6.8	14.4 15.4 17.2 26.8 38.9 73.2 40.1 34.1 30.4 32.6 34.1 74.9 528 582 1233 325 375 453 1974 1954 1949 1973 1973 1955 1949 1950 1950 6.25 6.05 6.90 7.98 6.91 3.71 .60 .000 .000 1995 1989 1989 1992 1956 1956 1956 1956 1952 1956 FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 19 7.20 5.97 30.1 176 21 Mar 24 12 Mar 19 12700 Ma 2.19 Sep 11 .00 Jul 24 .00 Ju 2.27 Sep 6 .00 Aug 3 .00 Ju 19 Dec 15 13600 Ma 2.22 Dec 15 9.00 Au 5230 4330 21820 12 6.7 6.8 12



07166500 VERDIGRIS RIVER NEAR ALTOONA, KS

LOCATION.--Lat $37^{\circ}29^{\circ}26^{\circ}$, long $95^{\circ}40^{\circ}49^{\circ}$, in SE $^{1}/_{4}$ NE $^{1}/_{4}$ SW $^{1}/_{4}$ sec.29, T.29 S., R.16 E., Wilson County, Hydrologic Unit 11070101, on left bank at downstream side of county highway bridge, 2.5 mi southwest of Altoona, 2.5 mi downstream from Big Cedar Creek, and at mile 227.9.

DRAINAGE AREA. -- 1,138 mi².

PERIOD OF RECORD. --October 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS. -- WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.18 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Sept. 9, 1944, nonrecording gage at same site and datum.

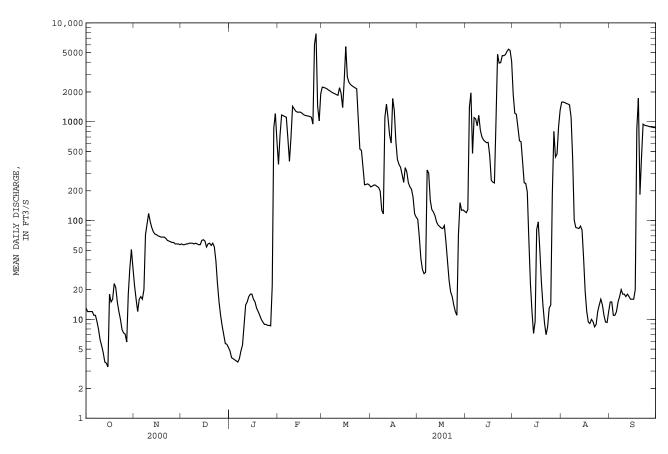
REMARKS.--Records good. Considerable regulation since 1960 by Toronto Lake (station 07165900), 43.6 mi upstream. Diversion from Altoona Reservoir upstream from station for municipal supply of Altoona and considerable diversion for irrigation upstream from station. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DATLY MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP 4.8 4.1 4.0 3.9 3.8 3.7 4.0 9.5 4.8 7.9 6.2 8.7 5.4 4.6 3.7 3.6 72 9.5 9.4 9.1 9.2 7.0 9 5 9.4 8.4 8.9 8.4 8.9 7.9 7.3 8.9 8.7 7.1 5.9 8 7 8.6 8.6 7.0 5 7 9 4 5.6 9.3 5.2 ---MEAN 13.6 58.4 45.3 96.9 89.8 229 MAX 3.3 5.2 MIN 3.7 7.0 8.4

07166500 VERDIGRIS RIVER NEAR ALTOONA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	710 6663 1987 5.73 1995	925 6814 1999 5.44 1981	597 3297 1993 5.16 1981	406 2242 1973 1.65 1981	639 2083 1975 1.13 1981	1151 5062 1973 1.76 1981	1197 4684 1994 1.83 1981	1183 6826 1961 26.3 1964	1457 4841 1995 15.1 1988	569 2945 1992 14.1 1991	291 1943 1985 4.25 1984	529 5119 1961 4.95 1980
SUMMARY	STATISTI	CS	FOR :	2000 CALENI	DAR YEAR	FC	OR 2001 WAT	TER YEAR		WATER YE	ARS 1961	- 2001
	MEAN ANNUAL M ANNUAL ME			364			599			803 1833 65.4		1999 1996
HIGHEST	DAILY ME	AN		6350	Jun 26		7800	Feb 25		32800		3 1986
	DAILY MEA SEVEN-DAY			.30 .47	Aug 26 Aug 20		3.3 4.0	Oct 15 Jan 1		.00		.9 1980 29 1984
MAXIMUM	PEAK FLC PEAK STA ANEOUS LC	GE					9170 22.05 3.1	Feb 24 Feb 24 Oct 15		71000 31.09 .00	Jul 1	2 1951 2 1951 times
ANNUAL 1	RUNOFF (A ENT EXCEE ENT EXCEE	C-FT)		264200 1120 60			433600 1860 84			582000 2560 136		
	ENT EXCEE			9.4			9.0			10		



07167500 OTTER CREEK AT CLIMAX, KS

LOCATION.--Lat $37^{\circ}42^{\circ}30^{\circ}$, long $96^{\circ}13^{\circ}30^{\circ}$, in SW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.8, T.27 S., R.11 E., Greenwood County, Hydrologic Unit 11070102, on right bank at downstream side of bridge on Kansas Highway 99, 0.5 mi south of Climax, 5.2 mi upstream from mouth, and 5.5 mi downstream from confluence of North and South Branches.

DRAINAGE AREA. -- 129 mi².

PERIOD OF RECORD. -- August 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 977.76 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Records good. Satellite telemeter at station.

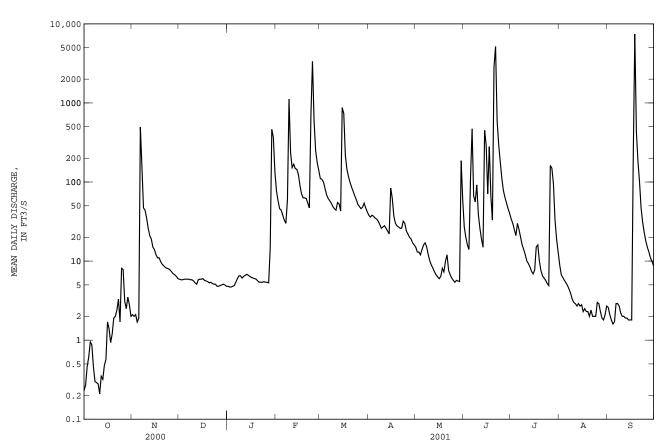
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 $\mathrm{ft^3/s}$ and maximum (*):

Date	Ti	me	Discharge (ft ³ /s)	e Gag	e height (ft)		Date	Time	e	Discharge (ft ³ /s)		e height (ft)
Feb 24 Jun 21	01 11		6,420 14,700		15.84 23.51		Sep 18	060	0	*16,300	*2	24.14
		DISCHA	ARGE, CUBIC	FEET PE		WATER YEAN VA		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.23 .27 .46 .61	2.1 2.0 2.1 1.7 1.9	5.9 5.8 5.9 5.9	4.8 4.7 4.7 4.8 4.9	77 58 46 44 38	111 108 100 83 69	38 36 38 37 35	15 13 13 12 14	27 20 16 14 113	34 30 25 21 30	8.9 6.7 6.2 5.7 5.3	2.6 2.1 1.8 1.6 1.7
6 7 8 9 10	.87 .46 .30 .29	495 154 47 44 35	5.9 5.8 5.8 5.6	5.4 6.0 6.5 6.5	33 30 60 1120 236	62 58 54 49 46	34 32 29 26 27	16 17 15 12	471 67 56 92 39	25 20 16 14 12	4.9 4.4 3.9 3.3 3.0	2.9 2.9 2.7 2.2 2.0
11 12 13 14 15	.21 .35 .32 .48	26 21 19 15 14	5.3 5.1 5.8 5.9 5.9	6.4 6.6 6.8 6.6 6.4	152 168 148 145 124	44 55 53 43 871	28 26 24 22 84	8.9 8.1 7.3 6.7 6.3	26 19 15 451 294	10 9.3 8.4 7.4 6.9	2.9 2.7 2.9 2.7 2.8	2.0 1.9 1.9 1.8 1.8
16 17 18 19 20	1.7 1.4 .93 1.2 1.9	12 11 11 9.8 9.1	6.0 5.7 5.6 5.5 5.3	6.2 6.1 6.0 5.9 5.6	90 71 63 63 62	736 219 145 117 99	62 37 30 28 27	6.0 6.4 8.1 7.3	71 280 66 33 2860	7.7 15 16 10 7.6	2.3 2.5 2.3 2.3 2.0	1.8 204 7420 432 182
21 22 23 24 25	2.0 2.4 3.3 1.7 8.1	8.7 8.3 8.1 8.0 7.7	5.4 5.2 5.1 5.1 4.8	5.4 5.4 5.4 5.5 5.4	54 47 698 3360 604	86 76 67 60 52	26 26 32 30 24	12 7.6 6.7 6.1 5.7	5180 596 297 181 112	6.5 6.1 5.7 5.2 4.9	2.4 2.0 2.0 2.0 3.0	101 47 31 23 18
26 27 28 29 30 31	7.8 3.1 2.5 3.5 2.8 2.0	7.3 6.9 6.7 6.4 6.0	4.8 4.9 5.0 5.1 5.0 4.8	5.4 5.3 15 464 366 132	251 176 141 	49 46 48 54 47 42	22 20 19 17 16	5.4 5.7 5.6 5.5 186	78 64 54 46 40	162 149 94 33 19	2.9 2.3 1.9 1.8 2.1 2.7	15 13 11 9.9 8.7
MEAN MAX MIN AC-FT	1.71 8.1 .21 105	33.6 495 1.7 2000	5.47 6.0 4.8 336	36.5 464 4.7 2240	291 3360 30 16180	121 871 42 7440	31.1 84 16 1850	16.7 186 5.4 1030	389 5180 14 23160	26.6 162 4.9 1630	3.32 8.9 1.8 204	285 7420 1.6 16960

07167500 OTTER CREEK AT CLIMAX, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	53.6 644 1987 .000 1954	88.0 1068 1999 .000 1954	44.4 255 1993 .000 1954	38.1 235 1973 .000 1954	67.8 370 1985 .000 1954	118 689 1973 .000 1956	148 1325 1994 .028 1981	127 762 1961 .96 1996	155 857 1951 .087 1953	73.5 798 1976 .000 1953	200 1995 .000	57.6 596 1961 .000 1953
SUMMARY	STATIST	ICS	FOR 2	000 CALEND	AR YEAR	F	OR 2001 WA	TER YEAR		WATER YE	ARS 1947 - 2	2001
	MEAN 'ANNUAL M ANNUAL ME			91.9			101			82.3 231 .55		1999 1953
LOWEST	DAILY MEA DAILY MEA SEVEN-DAY			9760 .21 .32	Jun 26 Oct 11 Oct 7		7420 .21 .32			21700 .00 .00	Jul 3 1 Jun 12 1 Jun 12 1	
MAXIMUM	I PEAK FLO I PEAK STA 'ANEOUS LO	AGE					16300 24.14 .15			107000 31.47 .00		1976 1976 imes
10 PERC 50 PERC	RUNOFF (A ENT EXCER ENT EXCER	EDS EDS		66710 140 11 .61			73140 136 9.9 2.0			59640 121 9.9 .00		



07169500 FALL RIVER AT FREDONIA, KS

LOCATION.--Lat $37^{\circ}30^{\circ}30^{\circ}$, long $95^{\circ}50^{\circ}00^{\circ}$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.24, T.29 S., R.14 E., Wilson County, Hydrologic Unit 11070102, on right bank at downstream side of bridge on Kansas Highway 96, 0.8 mi upstream from Clear Creek, 1.0 mi downstream from Salt Creek, 1.0 mi south of Fredonia, and at mile 25.3.

DRAINAGE AREA.--827 mi².

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for October and November 1938, published in WSP 1311. Published as "near Fredonia" 1952-57.

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1341: 1939-40.

GAGE.--Water-stage recorder. Datum of gage is 819.09 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Dec. 21, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good. Considerable regulation since 1949 by Fall River Lake (station 07168000), 28.9 mi upstream, and during low flow by Fredonia City Water Reservoir, 1.0 mi upstream. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1904, that of Apr. 16, 1945.

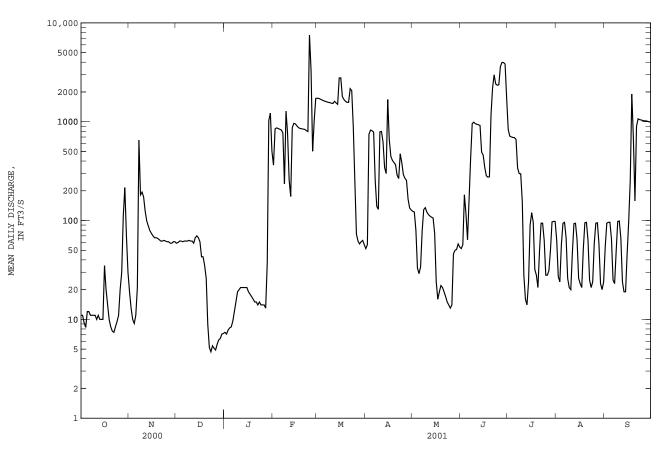
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	11 11 9.2 8.3 12	19 13 10 9.1	59 60 62 62 61	7.4 7.1 7.8 8.2 8.4	364 845 866 854 838	1730 1720 1690 1660 1630	52 57 746 823 810	124 122 80 33 29	52 57 182 117 64	835 714 702 693 690	63 27 24 58 94	54 94 96 96 65
6 7 8 9 10	12 11 11 11	21 650 182 194 173	62 62 62 63 62	9.6 12 15 19 20	826 769 235 1280 758	1610 1590 1570 1560 1540	785 256 139 130 790	34 78 129 135 122	165 431 957 989 954	663 340 299 297 155	96 67 26 21 20	25 23 49 98 99
11 12 13 14 15	10 11 10 10	124 99 88 79 74	62 59 67 70 67	21 21 21 21 21	257 175 870 962 951	1530 1610 1550 1500 2770	797 623 345 299 1680	115 111 108 106 74	942 931 916 492 460	28 16 14 24 90	47 93 94 64 26	66 24 19 19 46
16 17 18 19 20	35 20 14 9.9 8.4	70 67 67 66 64	61 43 43 35 26	19 18 17 16 15	906 871 854 849 841	2780 1800 1680 1610 1570	657 446 406 386 367	24 16 19 22 21	346 284 275 277 1170	120 96 32 28 21	23 21 52 95 96	98 254 1900 676 158
21 22 23 24 25	7.6 7.4 8.4 9.5	62 62 63 62 61	8.9 5.2 4.7 5.4 5.1	15 14 15 14 14	836 812 796 7520 3330	1570 2160 2060 882 247	288 266 473 385 291	19 17 15 14 13	2190 2980 2410 2340 2360	49 94 94 63 28	63 25 21 24 59	900 1070 1050 1040 1030
26 27 28 29 30 31	20 30 111 216 71 30	61 59 59 61 61	4.9 5.6 6.2 6.4 7.1 7.2	14 13 37 1030 1220 502	503 1020 1720 	73 62 58 61 63 57	268 255 165 134 128	14 46 50 51 58 54	3610 3980 3970 3830 1740	28 31 50 97 98 98	94 95 58 23 20 24	1020 1020 1010 999 988
MEAN MAX MIN AC-FT	24.8 216 7.4 1520	89.7 650 9.1 5340	39.2 70 4.7 2410	103 1220 7.1 6330	1132 7520 175 62890	1355 2780 57 83290	442 1680 52 26280	59.8 135 13 3680	1316 3980 52 78290	212 835 14 13070	52.0 96 20 3200	470 1900 19 27940

07169500 FALL RIVER AT FREDONIA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG SEP
MEAN MAX (WY) MIN (WY)	399 4332 1987 4.77 1981	499 3899 1999 4.79 1955	344 2060 1993 6.96 1981	263 1954 1993 3.84 1981	371 1573 1987 2.05 1981	750 3551 1973 1.59 1981	761 3536 1970 .91 1981	770 5487 1961 18.7 1967	910 3806 1957 10.3 1954	560 6435 1951 10.9 1955	175 303 1231 3387 1950 1961 5.78 .91 1983 1980
SUMMARY	STATIST	ICS	FOR 2	2000 CALEN	DAR YEAR	F	OR 2001 WA	TER YEAR		WATER YEA	RS 1950 - 2001
	MEAN 'ANNUAL N ANNUAL ME			420			434			509 1286 16.5	1999 1953
LOWEST	DAILY ME			9620 4.7 5.3	Jun 26 Dec 23 Dec 22		7520 4.7 5.3	Feb 24 Dec 23 Dec 22		26300 .00 .00	Oct 3 1986 Sep 9 1980
MAXIMUM MAXIMUM	SEVEN-DAI I PEAK FLO I PEAK STA	OW AGE		5.3	Dec 22		9920 19.77 4.0	Feb 24 Feb 24 Dec 23		49000 36.17	May 1 1981 Apr 16 1945 Apr 16 1945 at times
ANNUAL 10 PERC 50 PERC	RUNOFF (A ENT EXCENT ENT EXCENT	AC-FT) EDS EDS		305100 1600 67 9.6			314200 1530 70 11			368400 1530 75 9.1	



07169800 ELK RIVER AT ELK FALLS, KS

LOCATION.--Lat $37^{\circ}22^{\circ}32^{\circ}$, long $96^{\circ}11^{\circ}07^{\circ}$, in SW $^{1}/_{4}$ SE $^{1}/_{4}$ SE $^{1}/_{4}$ sec.3, T.31 S., R.11 E., Elk County, Hydrologic Unit 11070104, on left bank at downstream side of bridge on U.S. Highway 160 in Elk Falls, 2.0 mi upstream from Wildcat Creek, and at mile 57.5.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--220 mi².

PERIOD OF RECORD.--January 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 897.30 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

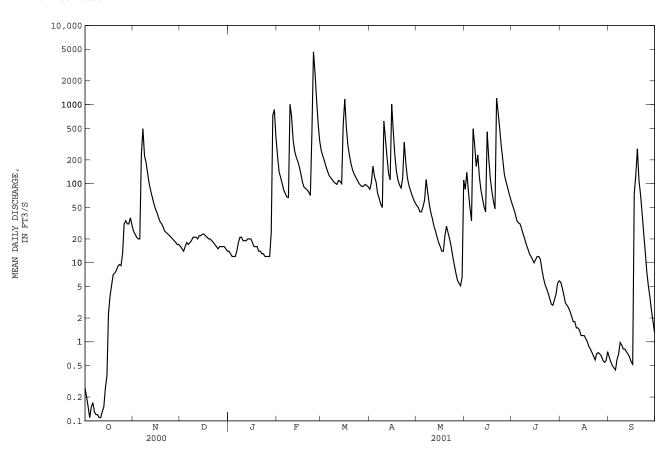
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of $4,000~{\rm ft}^3/{\rm s}$ and maximum (*):

Date	Tim	ne	Discharge (ft ³ /s)	e Gag	e height (ft)		Date	Tim	e	Discharge (ft ³ /s)	Gage	e height (ft)
Feb 24	160	00	*5,340	*	11.72		No oth	er peak g	reater t	han base d	ischarge	
		DISCHA	ARGE, CUBIC	C FEET PE		WATER YE Y MEAN VA		R 2000 TC) SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.26 .20 .15 .11	25 23 21 20 20	16 15 14 16 18	14 13 12 12	229 142 e120 e100 83	260 223 193 165 143	85 103 167 123 105	53 50 44 44 51	85 139 81 50 34	55 48 41 34 32	5.7 4.8 3.9 3.1 2.9	.64 .56 .50 .47
6 7 8 9 10	.17 .13 .12 .12 .11	231 495 226 186 135	17 18 19 21 21	14 18 21 21 19	75 68 67 1010 703	127 119 112 105 101	e75 e65 e55 e50 e620	62 113 78 55 43	495 309 166 231 123	31 27 23 20 17	2.7 2.4 2.1 1.8	.60 .70 .98 .91
11 12 13 14 15	.11 .13 .15 .26	100 81 67 56 48	21 20 22 22 23	19 19 20 20 20	354 257 216 191 162	98 110 107 100 555	366 217 134 112 1010	36 29 25 21 18	84 65 51 44 453	15 13 12 11 10	1.5 1.5 1.4 1.2	.81 .75 .70 .64
16 17 18 19 20	2.3 3.8 5.2 7.1 7.4	43 37 33 31 28	23 22 e21 e20 e20	18 16 16 16 14	131 104 90 87 83	1170 516 304 228 178	457 229 144 111 96	16 14 14 22 29	211 116 80 60 48	11 12 12 11 8.2	1.2 1.1 1.0 .87	.52 75 130 276 111
21 22 23 24 25	8.0 9.0 9.5 9.2	25 24 23 22 21	e19 e18 e17 e16 e15	14 13 13 12 12	78 71 444 4640 2480	149 132 121 111 101	88 119 334 184 119	24 20 16 12 9.4	1210 e800 e500 e300 e200	6.4 5.3 4.7 4.1 3.5	.73 .66 .59 .71 .73	73 43 24 14 7.8
26 27 28 29 30 31	31 34 31 31 37 30	20 19 18 17 17	e16 16 16 15 14	12 12 24 734 864 388	1140 562 343 	96 92 93 98 95 91	95 82 71 63 57	7.4 6.0 5.5 5.1 6.6 111	e130 107 90 75 64	3.0 2.9 3.4 4.0 5.5 5.9	.70 .66 .58 .55 .58	5.1 3.7 2.5 1.8 1.3
MEAN MAX MIN MED AC-FT	8.74 37 .11 2.3 538	70.4 495 17 26 4190	18.3 23 14 18 1120	78.5 864 12 16 4820	501 4640 67 152 27830	197 1170 91 119 12090	185 1010 50 112 10980	33.5 113 5.1 24 2060	213 1210 34 112 12700	15.9 55 2.9 11 976	1.62 5.7 .55 1.2 100	26.0 276 .44 .95 1540

07169800 ELK RIVER AT ELK FALLS, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	117 1410 1987 .000 1981	160 954 1999 .000 1981	111 488 1993 .035 1981	81.8 394 1973 .015 1981	141 554 1987 .021 1981	244 1247 1973 .074 1981	252 1227 1994 .062 1981	250 1232 1993 6.26 1991	288 1287 1995 2.57 1996	114 2080 1976 .22 1980	28.8 208 1985 .000 1980	49.2 381 1986 .000 1980
SUMMARY	STATIST:	ICS	FOR 2	2000 CALEND	AR YEAR	F	OR 2001 WAT	TER YEAR		WATER YE	ARS 1968	- 2001
	MEAN ANNUAL M			105			109			153 322 6.17		1999 1991
HIGHEST LOWEST	DAILY ME	EAN AN		4180 .01	Jun 26 Sep 20		4640 .11	Feb 24 Oct 4		47500 .00	Jul Aug 2	3 1976 6 1970
MAXIMUM	SEVEN-DAY I PEAK FLO I PEAK STA			.02	Sep 16		.12 5340 11.72	Oct 7 Feb 24 Feb 24		.00 200000 34.85	Jul	1970 3 1976 3 1976
INSTANT	ANEOUS LO	OW FLOW		76010			.10	Oct 4		.00 110700		times
10 PERC 50 PERC	ENT EXCE	EDS EDS		249 19			228 22			269 22		
90 PERC	CENT EXCE	±DS		.21			.74			.64		



07169800 ELK RIVER AT ELK FALLS, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD. -- Water years 1967 to May 1980, 2000 to current year.

 ${\tt REMARKS.--Unpublished\ records\ of\ intermittent\ sediment\ samples\ are\ available\ on\ the\ World\ Wide\ Web\ at\ http://ks.water.usgs.gov/linearized and the samples are available on the world wide who at http://ks.water.usgs.gov/linearized and the samples are available on the world wide who at http://ks.water.usgs.gov/linearized and the samples are available on the world wide who at http://ks.water.usgs.gov/linearized and the samples are available on the world wide who at http://ks.water.usgs.gov/linearized and the samples are available on the world wide who at http://ks.water.usgs.gov/linearized and the$ nwis. Sediment samples are collected only at selected flow conditions.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	
APR 25 MAY	1115	110	359	7.9	17.1	42	12	
31	1150	136	491	7.8	20.0	52	19	
22	1135 1125	1020 64	252 339	7.9 7.8	23.0 25.5	263 55	725 9.5	

07170060 ELK RIVER BELOW ELK CITY LAKE, KS

LOCATION.--Lat $37^{\circ}16^{\circ}46^{\circ}$, long $95^{\circ}46^{\circ}53^{\circ}$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.9, T.32 S., R.15 E., Montgomery County, Hydrologic Unit 11070104, on left bank, 600 ft downstream from Elk City Dam, and at mile 8.7.

DRAINAGE AREA. -- 634 mi².

PERIOD OF RECORD.--October 1965 to current year. Prior to October 1971, published as "below Elk City Reservoir."

GAGE.--Water-stage recorder. Datum of gage is 740.00 ft above sea level (levels by U.S. Army Corps of Engineers). Aug. 17, 1978, to Apr. 3, 1979, at site 600 ft downstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow completely regulated since 1966 by Elk City Lake (station 07170050), 600 ft upstream. Satellite telemeter at station.

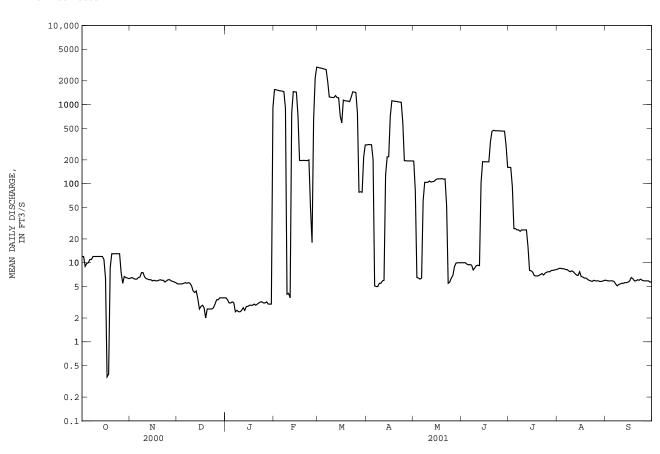
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	12 12 9.0 9.8	6.4 6.5 6.3 6.2 6.2	5.4 5.4 5.4 5.4 5.5	3.6 3.4 3.1 3.1 3.2	1550 1540 1520 1500 1490	2950 2910 2890 2850 2810	309 313 311 311 202	193 81 6.5 6.4 6.2	10 10 10 9.6 9.4	161 160 92 27 27	8.3 8.5 8.5 8.4 8.4	6.0 5.9 5.9 5.9 5.9
6 7 8 9 10	11 11 12 12 12	6.5 6.6 7.5 7.5 6.6	5.6 5.5 5.6 5.5 5.1	3.1 2.4 2.5 2.4 2.4	1480 1460 896 e4.0 4.1	2780 1970 1250 1240 1230	5.1 5.0 5.0 5.5 5.5	6.4 61 104 104	9.5 9.3 8.1 8.6 9.2	26 26 25 26 26	8.2 8.2 7.9 7.7 7.9	5.8 5.4 5.1 5.3 5.4
11 12 13 14 15	12 12 12 12 12	6.3 6.2 6.1 6.1 5.9	4.4 4.2 4.4 3.5 2.6	2.5 2.7 2.5 2.8 2.8	3.6 778 1460 1450 1440	1230 1300 1230 1220 717	5.9 6.0 128 218 e220	108 105 106 107 112	9.3 9.2 102 190 189	26 26 16 8.0 7.9	7.7 7.3 7.0 6.9 7.7	5.5 5.6 5.6 5.7
16 17 18 19 20	6.4 .36 .39 8.6	6.0 5.9 5.9 6.0 6.1	2.8 2.9 2.7 2.0 2.6	2.9 2.9 2.9 3.0 2.9	730 197 196 197 197	589 1140 1120 1110 1110	712 1120 1110 1100 1100	115 115 115 116 114	189 189 189 339 460	7.6 6.9 6.8 6.8	6.7 6.6 6.4 6.4	5.9 6.5 6.3 5.9
21 22 23 24 25	13 13 13 13	6.0 6.0 5.7 5.9 6.1	2.6 2.6 2.6 2.7 3.0	3.0 3.1 3.2 3.2 3.1	196 196 200 e50 e18	1090 1240 1450 1440 1420	1080 1080 1070 592 195	115 53 5.5 5.7 6.4	474 467 467 466 466	7.1 7.3 7.0 7.4 7.6	6.0 5.9 5.8 6.0 5.9	6.1 6.0 6.2 6.0 5.9
26 27 28 29 30 31	7.5 5.5 6.7 6.5 6.4 6.3	6.1 5.9 5.8 5.7 5.6	3.4 3.4 3.6 3.6 3.6 3.6	3.1 3.2 e3.0 e3.0 e3.0	e650 2180 2980 	788 78 79 78 219 309	195 194 194 194 194	6.9 8.9 9.9 10 10	463 462 461 305 161	7.7 7.7 8.0 8.0 8.1 8.2	5.9 5.8 5.8 5.9 6.0	5.9 5.9 5.7 5.7
MEAN MAX MIN AC-FT	9.76 13 .36 600	6.19 7.5 5.6 368	3.91 5.6 2.0 240	32.5 919 2.4 2000	877 2980 3.6 48720	1350 2950 78 82980	406 1120 5.0 24160	65.4 193 5.5 4020	205 474 8.1 12200	25.8 161 6.8 1580	6.96 8.5 5.8 428	5.81 6.5 5.1 346

07170060 ELK RIVER BELOW ELK CITY LAKE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	379 5813 1987 2.29 1996	472 3683 1975 .81 1991	331 1511 1993 1.18 1977	358 2054 1993 .71 1977	358 1669 1975 .20 1976	726 2739 1985 .18 1976	607 2874 1988 1.37 1991	665 2969 1994 .19 1972	849 2819 1993 3.96 1972	490 4636 1976 3.07 1974	117 1247 1985 .94 1971	99.1 747 1985 4.25 1975
SUMMARY	Y STATIST	ICS	FOR 2	2000 CALEN	DAR YEAR	F	OR 2001 WA	TER YEAR		WATER YE	EARS 1966	- 2001
	MEAN F ANNUAL I ANNUAL M			313			245			454 1119 14.1		1987 1981
	r DAILY M			4120	Jun 30		2980	Feb 28		11600	Oct	4 1986
	DAILY ME			.36			.36			.00		4 1966
		Y MINIMUM		2.5	Dec 18		2.5	Jan 7		.01		3 1966
	M PEAK FL						3020	Feb 27		11900	Oct	4 1986
	M PEAK ST						16.51			33.36		4 1986
	TANEOUS L						.00) Oct 16		.00) a	t times
ANNUAL	RUNOFF (AC-FT)		227500			177600			329100		
10 PERC	CENT EXCE	EDS		1090			1100			1500		
50 PERC	CENT EXCE	EDS		16			7.9			20		
90 PERC	CENT EXCE	EDS		5.7			3.1			3.0		



07170500 VERDIGRIS RIVER AT INDEPENDENCE, KS

LOCATION.--Lat $37^{\circ}13^{\circ}24^{\circ}$, long $95^{\circ}40^{\circ}37^{\circ}$, in NW $^{1}/_{4}$ NE $^{1}/_{4}$ Sec.32, T.32 S., R.16 E., Montgomery County, Hydrologic Unit 11070103, on left bank at downstream side of bridge on U.S. Highway 160, 1.0 mi east of Independence, 3.7 mi downstream from Elk River, and at mile 194.2.

DRAINAGE AREA. -- 2,892 mi².

AC-FT

PERIOD OF RECORD.--August 1895 to September 1904 (monthly figures only, published in WSP 1311), October 1921 to current year. REVISED RECORDS.--WSP 977: 1922, 1927-29. WSP 1117: Drainage area. WSP 1341: 1923-25(M), 1939.

GAGE.--Water-stage recorder. Datum of gage is 716.63 ft above sea level. Aug. 2, 1895, to Nov. 30, 1903, nonrecording gage at former mill dam 5.0 mi downstream and 2.5 mi northwest of Liberty, at datum about 4.00 ft lower. Apr. 20 to Sept. 25, 1904, nonrecording gage at Myrtle Street highway bridge 0.8 mi upstream at different datum. Nov. 14, 1921, to Sept. 30, 1929, nonrecording gage at Myrtle Street bridge at datum 0.87 ft higher than present datum. Oct. 1, 1929, to Dec. 25, 1933, nonrecording gage at site 400 ft upstream and present datum. Dec. 26, 1933, to Oct. 5, 1989, recording gage at site 400 ft upstream at present datum.

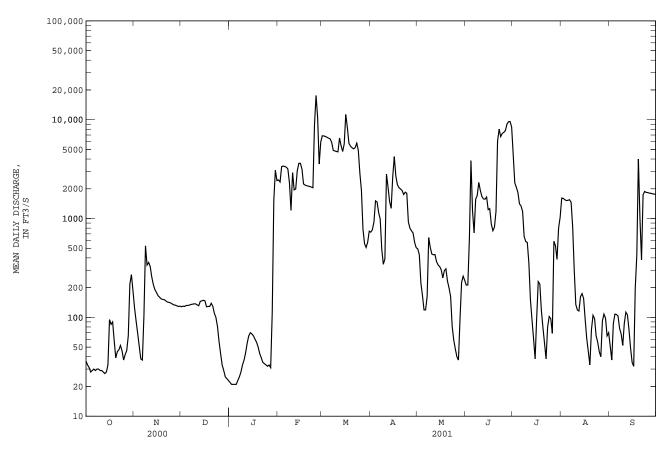
REMARKS.--Records good. Flow regulated since 1949 by Fall River Lake (station 07168000), since 1960 by Toronto Lake (station 07165900), and since 1966 by Elk City Lake (station 07170050). Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP MEAN 60.3 MAX MIN

07170500 VERDIGRIS RIVER AT INDEPENDENCE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	1904 21880 1987 18.3 1996	2379 13130 1975 23.1 1981	1654 7961 1993 28.0 1981	1342 6799 1973 16.8 1981	1819 6186 1975 16.7 1981	3416 13500 1973 18.5 1981	3350 12520 1988 13.6 1981	3170 9018 1994 214 1992	3959 11820 1995 67.1 1972	1824 10880 1976 26.6 1980	700 4967 1985 20.9 1983	774 4888 1989 13.2 1980
SUMMARY	STATIST	ICS	FOR	2000 CALE	NDAR YEAR		FOR 2001 T	WATER YEAR		WATER YE	ARS 1968	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUN MAXIMUN INSTANT ANNUAL	CANNUAL MANNUAL MEDAILY MEDAIL	EAN EAN AN Y MINIMUM OW AGE OW FLOW AC-FT)		1254 17300 23 28 910100 4390	Jun 27 Dec 31 Aug 22		1357 17600 21 22 18100 26.' 19 982700 4770	Feb 25 Jan 2 Dec 31 Feb 25 77 Feb 25 Jan 2		2189 4753 199 103000 1.5 4.4 117000 47.60 .00 1586000 7160	Sep 2 Oct 1 Apr 1 May 1	1999 1996 4 1986 25 1980 3 1991 7 1945 9 1943 times
50 PERC	CENT EXCE	EDS		286 36			225 35			481 34		



07170700 BIG HILL CREEK NEAR CHERRYVALE, KS

LOCATION.--Lat $37^{\circ}16^{\circ}00^{\circ}$, long $95^{\circ}28^{\circ}05^{\circ}$, in SE $^{1}/_{4}$ Sec.7, T.32 S., R.18 E., Labette County, Hydrologic Unit 11070103, on right bank at side of county highway bridge, 4.3 mi east of Cherryvale, and at mile 32.5.

DRAINAGE AREA.--37 mi².

PERIOD OF RECORD. -- October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 795.93 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to May 6, 1958, nonrecording gage at same site and datum.

REMARKS.--Records fair. Flow completely regulated since 1981 by Big Hill Lake (station 07170695), 1,200 ft upstream. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood in 1951 reached a stage of 18.92 ft, from information by local residents.

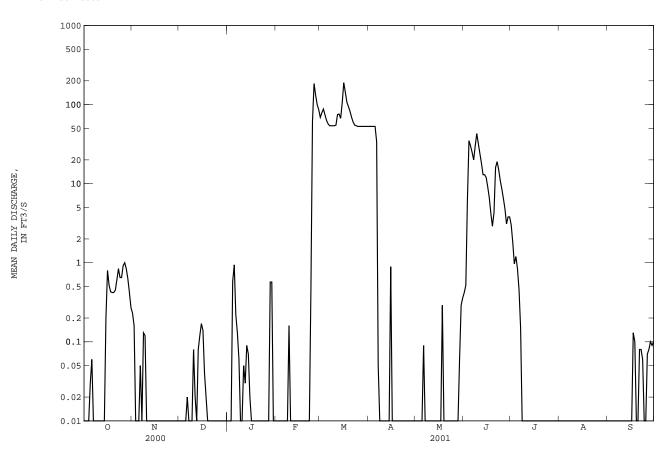
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY OCT NOV DEC FEB MAR APR MAY JUIN JUL AUG SEP JAN 1 .00 .23 .00 e.00 0.0 69 53 0.0 .42 3.0 0.0 .00 2 .00 .00 .00 .00 .16 .00 e.00 .00 79 53 .52 1.8 .00 e.00 53 6.1 .00 e1 2 4 0.0 0.0 0.0 58 0.0 74 53 0.0 35 0.0 0.0 5 63 30 .94 53 .03 .00 .00 .00 .00 e.84 .00 .00 .06 . 22 57 .00 6 05 0.2 0.0 34 09 25 e 46 0.0 .05 .00 .01 .00 .01 .13 .00 54 .00 20 e.15 .00 8 .00 .00 .06 .00 54 .00 e.00 .00 .00 9 .00 .12 .01 .00 .16 54 .00 .00 43 e.00 .00 .00 10 .01 54 .00 .00 .08 .00 .00 32 e.00 .00 .00 .00 11 .00 .02 .00 .00 .00 .00 .05 .00 55 .00 24 e.00 12 .00 .00 .00 .03 .00 75 .00 .00 18 e.00 .00 .00 13 .00 .00 .08 .09 .00 76 .00 .00 13 e.00 .00 .00 14 .00 .00 .12 .07 .00 67 .01 .00 13 e.00 .00 .00 15 .20 .00 .17 .02 .00 105 .89 .00 12 e.00 .00 .00 .14 189 9.1 .00 16 .80 .00 .00 .00 .00 .00 .00 .00 .04 .52 .00 .00 .00 143 .00 .00 6.6 .00 .00 .13 18 .43 .00 02 0.0 0.0 107 .00 .29 4.2 .00 0.0 .10 19 .42 .00 .00 .00 .00 .00 .00 .00 .00 94 .00 20 .42 .00 82 4.3 .00 .00 .00 .00 .00 .00 .00 .00 21 .45 .00 .00 .00 .00 69 .00 .00 16 .00 .00 .08 .00 .00 .00 .00 .61 .00 .00 .00 .00 .08 .00 23 84 0.0 0.0 .46 55 0.0 0.0 15 0.0 0.0 06 24 .00 61 54 11 .00 .65 .00 .00 .00 .00 .00 .00 25 .65 .00 e.00 .00 185 53 .00 .00 8.6 .00 .00 .00 .07 26 .92 .00 e.00 .00 132 53 .00 .00 6.5 .00 .00 27 1.0 .00 e.00 .00 100 53 .00 .00 4.8 .00 .00 .08 84 28 0.0 e.00 . 57 86 53 0.0 0.0 3 1 0.0 0.0 10 29 e.00 .57 53 .09 .63 .00 .00 .06 .00 .00 30 .00 e.00 .00 53 .00 .29 3.8 .00 .00 .10 31 27 e.00 0.0 ___ 53 .36 .00 0.0 MEAN .33 .023 .023 .11 20.2 72.5 10.0 .035 14.0 .27 .000 .030 MAX 1.0 .23 .17 .94 185 189 53 .36 43 3.0 .00 .13 MIN .00 .00 .00 .00 .42 .00 .00 .00 AC-FT 20 1.4 1.4 6.6 1120 4460 595 2.2 835 17 .00 1.8

arkansas river basin 455

07170700 BIG HILL CREEK NEAR CHERRYVALE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAX	Z JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	24.3 384 1987 .000 1958	28.1 151 1993 .000 1964	17.5 143 1993 .000 1964	18.2 145 1973 .000 1964	20.5 164 1985 .000 1964	41.4 228 1973 .000 1964	36.4 219 1994 .000 1981	42.5 269 1961 .000 1982	219 1977 0 .030	24.6 403 1976 .000 1963	6.60 97.4 1995 .000 1962	15.7 123 1993 .000 1963
SUMMARY	Y STATIST	ICS	FOR 2	2000 CALENI	DAR YEA	AR.	FOR 2001	WATER YE	CAR	WATER	YEARS 195	8 - 2001
	MEAN F ANNUAL I ANNUAL M			16.8			9.	75		26. 70.		1993 1982
HIGHEST	r daily m	EAN		457	Jun 2	21	189	Mar	16	10700	Jul	3 1976
	DAILY ME			.00	Aug	2		00 Oct	1		00 Oct	
		Y MINIMUM		.00	Aug	2		00 Oct	8		00 Oct	
	M PEAK FL						203	Feb		36000	Jul	3 1976
	M PEAK ST							32 Feb		23.		
	FANEOUS L							00 Oct	1		00 mo	st years
	RUNOFF (- ,		12220			7060			19330		
	CENT EXCE			48			53			49		
	CENT EXCE			.26				00		1.		
90 PERC	CENT EXCE	EDS		.00				00			00	



07172000 CANEY RIVER NEAR ELGIN, KS

LOCATION.--Lat $37^{\circ}00^{\circ}14^{\circ}$, long $96^{\circ}19^{\circ}00^{\circ}$, in NW $^{1}/_{4}$ NE $^{1}/_{4}$ sec.16, T.35 S., R.10 E., Chautauqua County, Hydrologic Unit 11070106, on right bank at upstream side of county highway bridge, 2 mi west of Elgin, and at mile 117.8.

DRAINAGE AREA.--445 mi².

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS. -- WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 763.32 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Sept. 13, 1961, at site 300 ft downstream at same datum. Prior to Apr. 6, 1989, at site on left bank at upstream side of county highway bridge at same datum.

REMARKS.--Records good. Satellite telemeter at station.

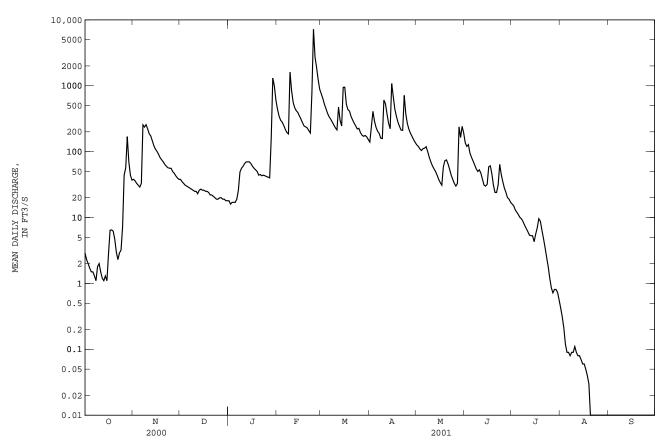
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 $\mathrm{ft^3/s}$ and maximum (*):

Date	Tim	ne	Discharge (ft ³ /s)	Gag	e height (ft)		Date	Time	:	Discharge (ft ³ /s)		height ft)
Feb 24	140	0	*9,950	*	11.97		No oth	er peak gr	reater tl	nan base d	ischarge.	
		DISCHA	ARGE, CUBIC	FEET PE		WATER YE Y MEAN VA		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	2.9 2.3 2.0 1.7 1.5	38 36 33 31 29	38 35 33 31 30	18 16 17 17	441 346 300 281 250	753 639 523 448 381	140 239 409 290 233	127 120 110 104 111	136 120 128 95 82	16 15 13 12	.42 .31 .21 .12	.00 .00 .00 .00
6 7 8 9 10	1.5 1.3 1.1 1.8 2.0	33 255 236 257 222	29 28 27 26 25	19 26 49 56 60	218 195 186 1620 849	338 311 282 254 230	204 189 160 158 608	113 119 100 82 70	72 63 55 50 53	10 9.5 8.6 7.6 6.8	.09 .08 .09 .09	.00 .00 .00 .00
11 12 13 14 15	1.5 1.2 1.1 1.3	187 173 146 123 109	25 23 26 27 26	66 70 70 70 66	561 465 418 393 348	214 474 299 245 946	532 373 270 223 1080	61 55 50 44 38	47 38 31 30 32	6.1 5.4 5.3 5.3 4.3	.09 .08 .08 .07	.00 .00 .00 .00
16 17 18 19 20	2.8 6.4 6.5 6.2 4.7	101 91 81 75 70	26 25 25 24 22	60 56 53 50 44	312 274 245 238 229	952 525 434 413 343	681 441 343 279 241	34 31 59 73 75	59 61 46 31 24	5.6 7.0 9.6 8.8 6.4	.06 .05 .04 .03	.00 .00 .00 .00
21 22 23 24 25	3.0 2.3 2.9 3.2 7.2	64 60 57 56 56	22 21 20 19	45 43 44 43 42	209 192 794 7190 2700	303 270 246 221 226	212 211 715 374 266	65 54 44 38 33	24 31 64 45 35	4.8 3.5 2.5 1.8 1.2	.00 .00 .00 .00	.00 .00 .00 .00
26 27 28 29 30 31	44 57 169 70 44 37	50 47 43 40 38	20 20 19 19 18 18	41 40 162 1310 989 601	1890 1230 880 	195 178 171 176 168 153	218 190 170 152 138	30 33 238 164 242 191	28 24 20 19 17	.86 .72 .81 .81 .73	.00 .00 .00 .00	.00 .00 .00 .00
MEAN MAX MIN AC-FT	15.8 169 1.1 973	94.6 257 29 5630	24.7 38 18 1520	137 1310 16 8450	830 7190 186 46120	365 952 153 22440	325 1080 138 19320	87.4 242 30 5370	52.0 136 17 3090	6.18 16 .56 380	.070 .42 .00 4.3	.000

07172000 CANEY RIVER NEAR ELGIN, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB MAR	APR MAY	JUN JUL	AUG SEP
MEAN 253 242 MAX 5482 1929 (WY) 1987 1975 MIN .000 .000 (WY) 1940 1940	1993 1973 .000 .000	211 406 1279 2502 1987 1973 .000 .000 1940 1940	493 511 2511 3041 1944 1961 .085 7.37 1981 1956	421 199 2242 1611 1957 1950 6.85 .000 1972 1954	59.6 159 1039 2058 1950 1961 .000 .000 1954 1953
SUMMARY STATISTICS	FOR 2000 CALENDA	AR YEAR	FOR 2001 WATER YEAR	WATER YE	ARS 1940 - 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS	.09	Mar 16 Sep 22 Sep 19	156 7190 Feb 24 .00 Aug 21 .00 Aug 21 .9950 Feb 24 .11.97 Feb 24 .00 Aug 20 113300 358 38 .00	271 891 8.61 79200 .00 .00 104000 42.35 .00 196600 525 40	Oct 3 1986 Oct 1 1939 Oct 1 1939 Oct 3 1986



07179500 NEOSHO RIVER AT COUNCIL GROVE, KS

LOCATION.--Lat $38^\circ39^\circ54^\circ$, long $96^\circ29^\circ38^\circ$, in NE $^1/_4$ NW $^1/_4$ sec.14, T.16 S., R.8 E., Morris County, Hydrologic Unit 11070201, on right bank at downstream side of bridge at city water plant in north part of Council Grove, 300 ft downstream from Mozler Creek, 1.0 mi upstream from Elm Creek, 1.7 mi downstream from Council Grove Lake, and at mile 448.0.

DRAINAGE AREA. -- 250 mi².

PERIOD OF RECORD. -- October 1938 to current year.

9.72

16

6.0

578

12.2

14

5.1 749 10.4

13

6.3

637

4.97

25

92

276

MEAN

MAX

MTN

AC-FT

16.1

24

2.6

991

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1341: 1939-40(M), 1942.

GAGE.--Water-stage recorder. Concrete control since Jan. 8, 1997. Datum of gage is 1,205.63 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to June 7, 1940, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow completely regulated since 1964 by Council Grove Lake (station 07179400), 1.7 mi upstream. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1903 reached a stage of 37.3 ft at water plant, from information by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY DEC OCT JAN FEB MAY AUG SEP 228 7.8 9.1 12 6.7 .90 16 5.4 26 5.4 11 1 2 2.6 14 5.1 12 6.6 .92 26 5.5 140 7.9 11 9.0 3 14 5.2 13 6 9 87 27 5.6 146 7.4 10 9.1 4.2 5.7 7.0 6.9 .83 27 14 13 6.3 143 7.4 5 9.7 15 12 13 7.1 .70 27 145 7.6 9.5 3.2 6 9.5 12 13 7.3 1.2 42 5.4 151 6.9 3.3 16 12 9.1 12 12 5.4 3.2 9.4 13 7.6 57 384 715 6.6 9.5 9.5 14 1140 9.3 8 8.5 58 516 6.4 9.5 8.8 14 12 7.9 5.3 74 192 1140 6.2 10 14 8.9 14 12 7.4 5.5 91 5.1 1120 6.2 9.7 2.7 13 5.8 2.3 11 20 9.1 14 7.5 93 1120 6.1 9.5 12 13 18 17 8.7 e14 14 13 13 6.2 16 105 3.9 9.1 2.6 490 1110 6.0 936 5.9 363 14 8.8 e14 13 3.4 165 e895 6.0 9.4 4.1 15 18 9.1 14 13 1.7 173 29 2.7 541 6.2 9 2 10 13 622 194 6.2 10 16 18 14 306 12 8.9 14 14 13 13 1.3 2.6 16 16 17 19 1130 310 229 6.0 11 18 21 1110 149 253 9.2 6.0 2.6 5.9 9.4 21 11 1.8 485 7 5 20 22 8.6 14 1.8 27 6.6 2.7 292 5.9 15 9.5 9.5 9.7 9.4 21 21 9.0 6.8 27 6.6 291 5.9 22 22 8.9 8.9 14 12 6.3 6.4 1.5 1.9 26 7.0 6.3 2.7 514 653 5.9 15 17 23 21 26 2.6 6.5 24 21 8.2 13 25 26 6.8 2.5 650 10 16 9.5 126 3 6 25 24 7.3 12 6.6 26 2.5 647 11 16 7 3 26 21 7.1 12 6.6 102 208 2.6 643 12 15 12 7.3 6.8 12 12 6.5 7.5 7.2 6.4 2.7 2.7 27 21 1.2 159 267 11 13 12 28 22 .92 124 8.9 11 12 12 12 8.1 29 22 6.4 7.4 26 5.7 3.1 11 9.5 12 30 21 6.0 7.0 ---26 5.5 5.1 11 9.6 12 12 6.9 ___ 170

144

70

1130

8850

83.7

490

5 5

4980

43.9

516

2 5

2700

491

1140

29200

7 7

7.64

12

5 9

470

11.7

17

9.1

721

7.61

12

2.3

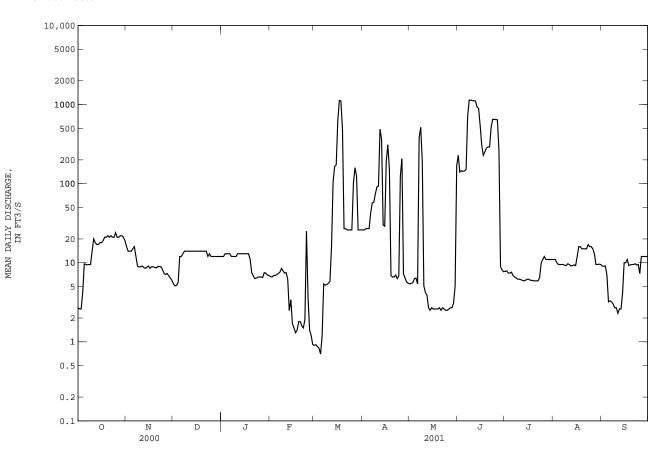
453

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07179500 NEOSHO RIVER AT COUNCIL GROVE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	112 1387 1974 .000 1939	64.7 852 1999 .000 1939	59.9 718 1945 .000 1939	54.2 503 1973 .000 1939	63.0 579 1949 .000 1939	119 702 1973 .000 1940	201 1424 1944 .000 1940	228 1387 1993 .43 1954	247 1656 1995 .030 1956	214 2858 1951 .000 1940	72.8 1103 1993 .000 1939	77.1 984 1951 .000 1939
SUMMARY	Y STATIST	ICS	FOR 2	2000 CALENI	DAR YEAR	F	OR 2001 WA	TER YEAR		WATER YE	ARS 1939	- 2001
	MEAN F ANNUAL I ANNUAL MI			23.7			69.9			126 498 5.37		1951 1953
HIGHEST	r daily m	EAN		292	Feb 27		1140	Jun 8		34000	Jul :	
	DAILY ME			.70	Feb 16		.70	Mar 5		.00	Oct	1 1938
		Y MINIMUM		.80	Feb 15		.91	Feb 27		.00	Oct	1 1938
	M PEAK FLO						1160	Jun 8		121000		11 1951
	M PEAK ST						11.46			36.29		11 1951
	CANEOUS LO						.60	Mar 5		.00	at	t times
ANNUAL	RUNOFF (AC-FT)		17210			50600			91560		
10 PERG	CENT EXCE	EDS		25			167			234		
50 PERG	CENT EXCE	EDS		8.4			9.5			14		
90 PERG	CENT EXCE	EDS		2.3			2.7			.80		



07179730 NEOSHO RIVER NEAR AMERICUS, KS

LOCATION.--Lat $38^{\circ}28^{\circ}01^{\circ}$, long $96^{\circ}15^{\circ}01^{\circ}$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.24, T.18 S., R.10 E., Lyon County, Hydrologic Unit 11070201, on right bank, 0.1 mi below Ruggles Dam, 2.0 mi south of Americus, 12.5 mi upstream from Allen Creek, and 24.0 mi upstream from Cottonwood River.

DRAINAGE AREA. -- 622 mi².

PERIOD OF RECORD. -- June 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,106.99 ft above sea level (levels by U.S. Army Corps of Engineers). Apr. 10, 1989, to Nov. 1990 at site 0.4 upstream at present datum. Aug. 8, 1963, to Apr. 11, 1989, and Nov. 21, 1990, to current year, water-stage recorder at present site and datum.

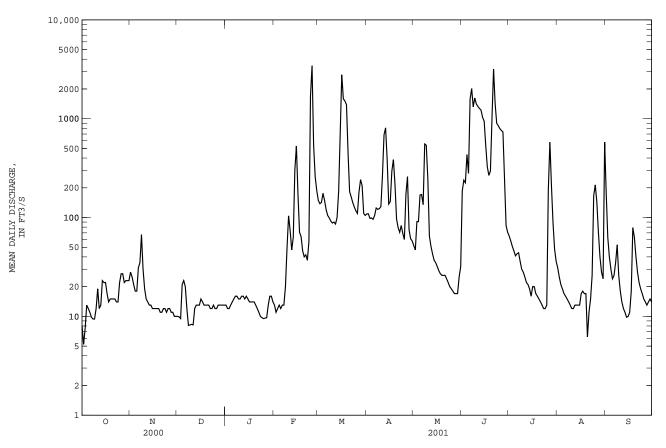
REMARKS.--Records good. Flow moderately regulated since 1964 by Council Grove Lake (station 07179400). Low flow occasionally regulated by Ruggles Dam 0.1 mi upstream. Satellite telemeter at station.

		DISCHAR	RGE, CUBIO	C FEET PE		WATER YE Y MEAN VA	AR OCTOBEI	R 2000 TO	SEPTEMBE	R 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	8.1 5.2 7.6 13	28 25 21 18 18	10 9.9 9.5 21 23	13 12 12 13 14	13 11 12 13 12	149 138 142 176 149	109 109 98 99 96	52 47 91 91 169	186 239 225 435 280	65 58 51 46 41	31 25 21 19 17	174 63 40 30 24
6 7 8 9 10	11 9.8 9.4 9.4	31 35 67 30 19	20 12 8.1 8.2 8.3	15 16 16 15 15	13 13 20 49 104	120 105 99 92 88	105 125 121 123 129	171 135 555 539 246	1580 2020 1320 1620 1410	43 44 36 30 28	16 15 14 13	26 35 53 26 18
11 12 13 14 15	19 12 13 23 22	15 14 13 13	8.2 12 13 13	16 16 15 16 15	74 47 63 303 530	90 86 100 184 714	269 688 808 387 137	65 51 43 37 35	1330 1270 1220 1030 945	25 22 21 19 16	12 13 13 13 13	14 12 11 9.8
16 17 18 19 20	22 17 14 15	12 12 12 12 11	15 14 13 13	14 14 14 14 13	172 71 64 46 40	2780 1590 1510 1390 455	145 296 386 216 97	32 29 27 26 26	535 326 267 296 1020	20 20 17 16 15	17 18 17 17	11 18 79 63 40
21 22 23 24 25	15 15 14 14 22	11 12 12 11 12	13 12 12 13 12	12 11 10 9.7 9.5	42 37 57 1690 3440	183 162 142 128 117	79 71 83 69 60	26 24 22 20 19	3170 1430 900 851 795	14 13 12 12 13	11 15 26 167 214	28 22 19 17 15
26 27 28 29 30 31	27 27 22 23 23 23	12 11 11 10 10	12 13 13 13 13 13	9.6 9.7 13 16 16 14	542 258 188 	110 181 242 210 110 105	173 259 75 61 58	18 17 17 17 25 32	762 734 246 83 71	190 579 210 88 48 36	144 71 40 28 24 580	14 13 14 15 14
MEAN MAX MIN AC-FT	16.0 27 5.2 981	17.7 67 10 1050	12.8 23 8.1 786	13.5 16 9.5 830	283 3440 11 15720	382 2780 86 23500	184 808 58 10970	87.2 555 17 5360	887 3170 71 52750	59.6 579 12 3670	53.0 580 6.2 3260	30.9 174 9.8 1840

07179730 NEOSHO RIVER NEAR AMERICUS, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN 276 230 MAX 2278 2304 (WY) 1974 1999 MIN 2.41 6.90 (WY) 1965 1967	174 134 916 854 1974 1973 5.87 3.73 1967 1967	212 1048 1973 3.64 1967	365 2100 1973 6.87 1967	540 2258 1999 11.1 1989	618 3285 1995 24.4 1967	648 2761 1995 15.9 1989	424 3127 1993 12.5 1964	164 1498 1993 12.5 1978	175 1526 1973 10.7 1980
SUMMARY STATISTICS	FOR 2000 CALE	ENDAR YEAR	FC	R 2001 WAT	ER YEAR		WATER YEA	RS 1964	- 2001
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS	1020 5.2 8.5 47940 142 21 12	Mar 25 2 Oct 2		3440 5.2 9.5 4890 20.24 .00 120700 406 24 12	Feb 25 Oct 2 Oct 1 Feb 25 Feb 25 Aug 20		330 1106 28.2 14700 .00 .24 17400 27.84 .00 239200 890 66 11	Oct Oct 2 Jul 2 Jul 2	1993 1989 2 1998 2 1963 6 1964 2 1993 2 1993 times



07179795 NORTH COTTONWOOD RIVER BELOW MARION LAKE, KS

LOCATION.--Lat $38^{\circ}22'00"$, long $97^{\circ}05'00"$, in SE $^{1}/_{4}$ NW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.27, T.19 S., R.3 E., Marion County, Hydrologic Unit 11070202, on left bank, 0.25 mi downstream from outlet of dam, 1.6 mi upstream from South Cottonwood River, 3.0 mi northwest of Marion, and at mile 126.5.

DRAINAGE AREA. -- 200 mi².

PERIOD OF RECORD.--July 1968 to current year. Prior to Oct. 1, 1991, published as "Cottonwood River."

REVISED RECORDS. -- WDR KS-77-1: 1976.

GAGE. -- Water-stage recorder. Datum of gage is 1,296.57 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow completely regulated since 1968 by Marion Lake (station 07179794), 0.25 mi upstream. Satellite telemeter at station.

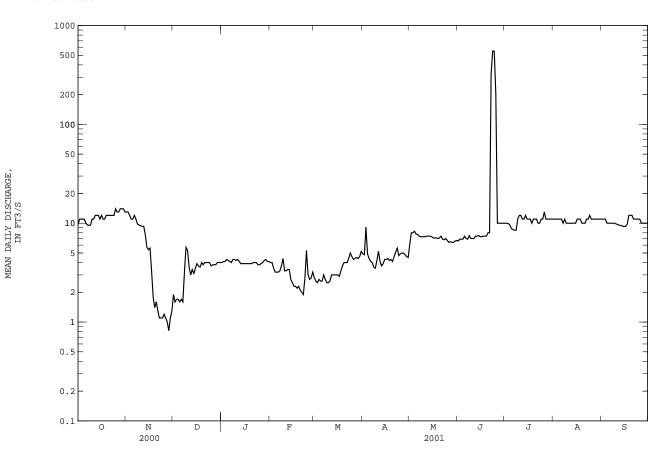
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	9.7 11 11 11	13 13 12 11	1.9 1.6 1.7 1.7	4.0 4.1 4.1 4.3 4.2	4.0 4.0 3.5 3.2 3.2	2.8 2.6 2.5 2.7 2.6	4.9 4.8 9.1 4.9 4.4	6.1 8.0 8.0 8.3 7.8	6.6 6.9 6.9 7.4	10 10 9.9 9.6 8.8	11 11 11 11	11 11 11 10 10
6 7 8 9 10	10 9.6 9.5 9.6 11	12 11 9.8 9.6 9.4	1.7 1.6 3.2 5.7 5.3	4.1 4.0 4.3 4.3	3.2 3.3 3.7 4.4 3.3	2.6 3.0 2.7 2.5 2.5	4.1 4.0 3.6 3.5 4.2	7.7 7.4 7.3 7.3 7.3	7.0 6.9 7.5 7.0 7.0	8.6 8.5 8.5 11	11 10 11 10	10 10 10 10 9.8
11 12 13 14 15	11 12 12 12 11	9.3 9.3 7.6 5.7 5.4	3.6 3.0 3.4 3.1 3.5	4.3 4.1 3.9 3.9 3.9	3.3 3.4 3.4 2.7 2.5	2.6 3.0 3.0 3.0 e3.0	5.2 4.1 3.7 3.9 4.3	7.3 7.4 7.4 7.4 7.3	7.0 7.4 7.4 7.5 7.3	12 11 11 12 11	10 10 10 10	9.7 9.5 9.5 9.3 9.3
16 17 18 19 20	12 11 11 12 12	5.6 3.3 1.8 1.4 1.6	3.9 3.7 3.6 4.0 3.8	3.9 3.9 3.9 3.9	2.3 2.3 2.2 2.3 2.1	e3.0 2.9 3.3 3.7 4.0	4.3 4.4 4.2 4.3 4.1	7.1 7.1 7.1 7.0 7.1	7.3 7.4 7.4 7.4 e8.0	11 11 10 11 11	11 11 11 10 10	9.3 9.8 e12 12
21 22 23 24 25	12 12 12 12 14	1.3 1.1 1.1 1.1 1.2	4.0 4.0 4.0 4.0 3.7	4.0 4.0 4.0 3.8 3.8	2.0 1.9 2.8 e5.3 e3.0	4.0 4.0 4.4 5.0 4.6	4.6 5.1 5.6 4.7 4.9	7.4 6.9 6.8 7.0 6.7	e8.0 325 553 551 204	11 10 10 11 11	10 11 11 12 11	11 11 11 11 11
26 27 28 29 30 31	13 13 14 14 14 13	1.1 1.0 .82 1.1 1.3	3.8 3.8 4.0 4.0	3.9 4.0 4.2 4.3 4.1	2.7 2.8 3.2 	4.3 4.4 4.5 4.4 4.6 5.2	5.0 5.0 4.8 4.6 4.5	6.4 6.5 6.4 6.6 6.7	10 10 10 10 10	e13 11 11 11 11	11 11 11 11 11	10 10 10 10 10
MEAN MAX MIN AC-FT	11.7 14 9.5 719	5.80 13 .82 345	3.38 5.7 1.6 208	4.05 4.3 3.8 249	3.07 5.3 1.9 171	3.46 5.2 2.5 213	4.63 9.1 3.5 275	7.14 8.3 6.1 439	61.2 553 6.6 3640	10.6 13 8.5 652	10.7 12 10 657	10.3 12 9.3 615

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07179795 NORTH COTTONWOOD RIVER BELOW MARION LAKE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2001, BY WATER YEAR (WY)

00	CT NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
(WY) 19	92 549 74 1999 99 1.04	46.8 469 1999 .67 1969	30.3 229 1973 .77 1992	57.8 411 1973 1.05 1992	82.9 703 1973 .70 1969	108 559 1973 .54 1969	139 1035 1993 1.61 1992	138 860 1995 2.00 1992	113 997 1993 3.85 1992	37.5 528 1993 1.87 1992	28.2 191 1985 1.74 1992
SUMMARY STA	TISTICS	FOR	2000 CALENI	DAR YEAR	F	OR 2001 WA	TER YEAR		WATER YEA	ARS 1969	- 2001
ANNUAL MEAN HIGHEST ANNU LOWEST ANNU	UAL MEAN		38.2			11.3			75.8 322 1.98		1993 1992
HIGHEST DAIL LOWEST DAIL ANNUAL SEVE		M	942 .82 1.1	Mar 7 Nov 28 Nov 22		553 .82 1.1	Jun 23 Nov 28 Nov 22		4000 .00 .25	Oct	26 1993 3 1984 30 1969
MAXIMUM PEAL MAXIMUM PEAL INSTANTANEO	K STAGE					578 7.55 .70			4530 22.58 .00	May Dec Oct	26 1993 4 1998 3 1984
ANNUAL RUNO 10 PERCENT 1 50 PERCENT 1 90 PERCENT 1	EXCEEDS EXCEEDS		27710 12 9.5 3.2			8180 11 7.0 2.7			54920 105 7.6 1.9		



07180400 COTTONWOOD RIVER NEAR FLORENCE, KS

LOCATION.--Lat $38^{\circ}14^{\circ}10^{\circ}$, long $96^{\circ}52^{\circ}37^{\circ}$, in NW $^{1}/_{4}$ SW $^{1}/_{4}$ sec.10, T.21 S., R.5 E., Marion County, Hydrologic Unit 11070202, on left bank at downstream side of county highway bridge, 0.4 mi upstream from Martin Creek, 2.5 mi east of Florence, 3.3 mi downstream from Doyle Creek, and at mile 102.4.

DRAINAGE AREA. -- 754 mi².

PERIOD OF RECORD. -- June 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,231.49 ft above sea level. Since Aug. 10, 1965, auxiliary water-stage recorder 2.8 mi downstream at datum 1,219.49 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow moderately regulated since 1968 by Marion Lake (station 07179794), 24 mi upstream. Satellite telemeter at station.

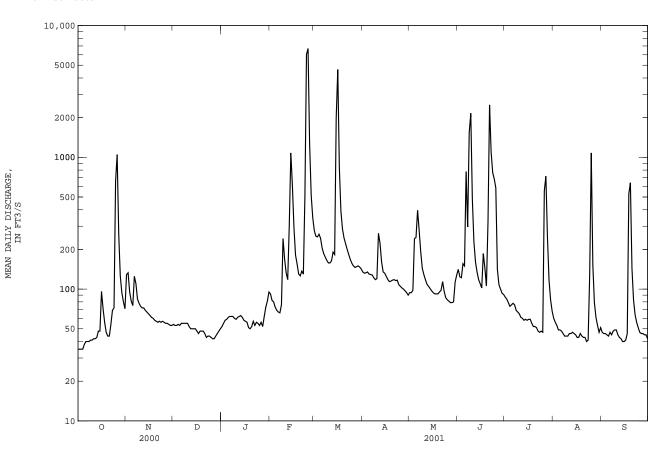
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1872, 32.5 ft July 11, 1951, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DATLY MEAN VALUES DAY OCT NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP e55 e55 12 72 223 e50 e50 e50 e50 17 e48 e46 e48 e48 e50 e48 e46 e43 e44 e44 e43 e42 e42 e44 e46 e48 e50 ---MEAN 72.7 49.2 59.8 87.8 86.8 MAX MIN

07180400 COTTONWOOD RIVER NEAR FLORENCE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)

OCT NOV	DEC JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG SE	EP
MEAN 280 322 MAX 2203 4356 (WY) 1986 1999 MIN 11.5 19.8 (WY) 1965 1967	164 138 755 728 1999 1962 18.2 20.4 1992 1967	233 1308 1973 19.8 1967	386 3251 1973 26.9 1981	418 1533 1983 25.6 1981	559 4981 1993 23.0 1967	695 3691 1965 53.4 1991	370 4044 1993 22.8 1966	152 22 833 175 1985 196 16.9 21. 1991 196	62 .8
SUMMARY STATISTICS	FOR 2000 CALE	NDAR YEAR	FOR	2001 WAT	ER YEAR		WATER YEA	RS 1962 - 200	01
ANNUAL MEAN HIGHEST ANNUAL MEAN LOWEST ANNUAL MEAN HIGHEST DAILY MEAN LOWEST DAILY MEAN ANNUAL SEVEN-DAY MINIMUM MAXIMUM PEAK FLOW MAXIMUM PEAK STAGE INSTANTANEOUS LOW FLOW ANNUAL RUNOFF (AC-FT) 10 PERCENT EXCEEDS 50 PERCENT EXCEEDS 90 PERCENT EXCEEDS	173 3530 31 33 125300 292 84 37	Mar 24 Sep 15 Sep 12	1	198 6700 35 37 8630 22.45 34 43000 270 75 44	Feb 25 Oct 1 Oct 1 Feb 25 Feb 25 Oct 1		328 1298 39.9 47800 4.8 6.9 73700 28.81 4.4 237900 660 84 28	Nov 2 199 Jun 28 199 Oct 8 196 Nov 2 199 Nov 2 199 Jun 28 199	91 98 91 64 98 98



07180500 CEDAR CREEK NEAR CEDAR POINT, KS

LOCATION.--Lat 38°11'55", long 96°49'22", in NE $^1/_4$ NE $^1/_4$ NE $^1/_4$ sec.25, T.21 S., R.5 E., Chase County, Hydrologic Unit 11070202, on right bank at upstream side of county highway bridge, 4.0 mi south of Cedar Point, and at mile 9.4.

DRAINAGE AREA.--110 mi².

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1211: 1944(M). WSP 1341: 1940-41, 1942(M), 1943, 1945(M).

GAGE.--Water-stage recorder. Datum of gage is 1,262.50 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Sept. 28, 1944, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1929 reached a stage of 24.63 ft from floodmarks on house on left bank where flood in 1951 reached a stage of 25.7 ft.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,600 ft^3/s and maximum (*):

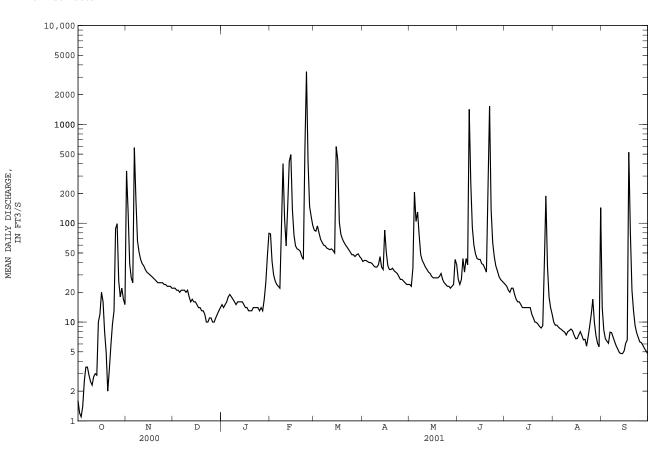
Date	Tim	ie	Discharge (ft ³ /s)	Gag	e height (ft)		Date	Time		Discharge (ft ³ /s)		height
Feb 24 Jun 8	150 160		*5,860 4,740		15.21 13.74		Jun 21	0600)	4,080	1	2.67
		DISCHA	ARGE, CUBIC	FEET PE		WATER YE Y MEAN VA		R 2000 TO	SEPTEMB	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1.6 1.2 1.1 1.4 2.5	338 131 39 28 25	22 22 21 21 20	e15 e14 15 16 18	78 41 30 26 24	85 83 94 80 69	41 42 42 41 40	24 23 35 207 104	27 24 27 44 32	24 23 21 20 22	10 9.3 9.3 8.9 8.6	14 8.3 6.8 6.4 6.1
6 7 8 9 10	3.5 3.5 2.9 2.5 2.3	581 172 66 51 43	21 21 21 20 21	19 18 17 16 15	23 22 91 400 111	64 60 59 56 55	40 39 37 36 36	130 76 48 42 39	44 38 1420 254 90	22 19 17 16 16	8.4 8.1 7.9 7.4 8.0	7.9 7.8 7.0 6.3 5.7
11 12 13 14 15	2.8 3.0 2.9 10	39 37 34 32 31	e18 e16 e17 e16 e16	16 16 16 16 15	59 148 424 495 137	54 55 53 50 597	38 46 36 34 85	36 34 32 31 29	60 49 44 43 43	15 14 14 14 14	8.2 8.5 8.2 7.4 6.8	5.3 4.9 4.8 4.8 5.1
16 17 18 19 20	20 16 7.9 4.9 2.0	30 29 28 27 26	e15 e14 e14 e13 e13	14 14 13 13	76 59 55 54 52	433 102 77 69 64	51 37 34 34 35	28 28 28 28 29	39 38 35 32 221	14 14 12 11	6.8 7.4 8.0 7.3 6.6	6.1 6.6 522 79 21
21 22 23 24 25	3.3 5.8 9.5 13	25 25 25 25 24	e12 e10 e10 e11 e11	14 14 14 14 13	46 43 577 3420 418	60 57 54 51 48	33 32 31 29 27	31 27 25 24 23	1530 137 64 46 37	9.9 9.5 9.0 8.7 9.2	6.7 5.7 7.1 9.1	13 9.2 7.8 7.0 6.3
26 27 28 29 30 31	99 26 18 22 17	24 23 23 23 22 	e10 e10 e11 e12 e13 e14	14 13 17 25 46 79	147 117 95 	48 46 48 49 46 44	27 26 25 24 24	23 22 23 24 43 38	33 29 27 26 25	38 189 37 18 14	17 9.9 7.3 6.1 5.6	6.2 5.8 5.4 5.1 4.8
MEAN MAX MIN MED AC-FT	13.6 99 1.1 4.9 834	67.5 581 22 28 4020	15.7 22 10 15 964	18.5 79 13 15 1130	260 3420 22 77 14420	90.6 597 44 57 5570	36.7 85 24 36 2190	43.0 207 22 29 2650	152 1530 24 41 9040	22.1 189 8.7 14 1360	12.6 144 5.6 8.0 777	26.9 522 4.8 6.4 1600

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07180500 CEDAR CREEK NEAR CEDAR POINT, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	47.3 392 1986 .000 1940	41.2 542 1999 .000 1954	31.0 264 1945 .000 1955	26.8 195 1949 .000 1940	43.0 260 2001 .000 1957	71.3 449 1973 .44 1956	90.8 554 1944 .58 1954	86.4 507 1993 .006 1955	122 814 1965 .000 1955	64.1 594 1951 .000 1954	29.6 179 1995 .000 1954	38.8 414 1941 .000 1953
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	DAR YEAR	FC	OR 2001 WAT	TER YEAR		WATER YEA	ARS 1939	- 2001
	MEAN 'ANNUAL I ANNUAL MI			31.5			61.5			57.6 159 .91		1993 1954
HIGHEST	DAILY M	EAN		902	Feb 25		3420	Feb 24		10900		29 1951
	DAILY MEA SEVEN-DAY	AN Y MINIMUM		$\frac{1.0}{1.4}$	Sep 21 Aug 29		$\frac{1.1}{2.1}$	Oct 3 Oct 1		.00		12 1939 12 1939
	PEAK FLO						5860 15.21	Feb 24 Feb 24		52400 23.70		29 1951 29 1951
INSTANT	ANEOUS LO	OW FLOW					1.0	Oct 2		.00		t times
	RUNOFF (A	- ,		22900 56			44550 85			41740 76		
	ENT EXCEI			16			23			76 16		
	ENT EXCE			2.4			6.5			1.9		



07182250 COTTONWOOD RIVER NEAR PLYMOUTH, KS

LOCATION.--Lat $38^{\circ}23^{\circ}51^{\circ}$, long $96^{\circ}21^{\circ}21^{\circ}$, in NE $^{1}/_{4}$ NE $^{1}/_{4}$ SE $^{1}/_{4}$ sec.13, T.19 S., R.9 E., Chase County, Hydrologic Unit 11070203, on right bank at upstream side of county highway bridge, 0.8 mi downstream from Buckeye Creek, 1.5 mi southwest of Plymouth, and at mile 39.2.

DRAINAGE AREA. -- 1,740 mi².

PERIOD OF RECORD. -- March 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,109.04 ft above sea level.

Discharge

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow partially regulated since 1968 by Marion Lake (station 07179794), 87.3 mi upstream. Satellite telemeter at station.

Discharge

Gage height

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1903, 37.8 ft July 11, 1951, from information by local residents, discharge not determined.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of $4,900~{\rm ft}^3/{\rm s}$ and maximum (*):

Gage height

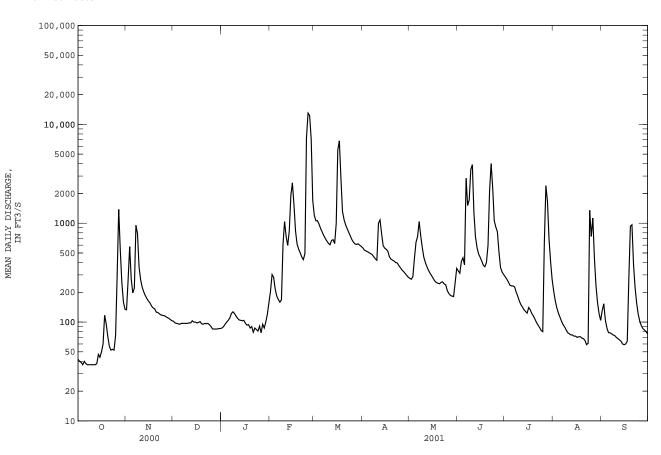
Date	Tir	me	(ft ³ /s)	Gas	(ft)		Date	Time	е	(ft ³ /s)		ft)
Feb 25 Mar 17	090 080		*13,200 7,190	,	*31.03 22.57		Jun 6 Jun 9	090 240		4,910 4,980		8.36 8.50
		DISCHA	RGE, CUBIC	FEET PI		WATER YE Y MEAN VA		R 2000 TO	SEPTEMB.	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	133	102	e87	205	1200	563	277	329	287	205	131
2	40	266	98	e90	302	1060	534	271	312	272	164	153
3	39	581	97	e95	284	1060	524	289	411	255	139	105
4	37	272	96	100	216	981	516	444	447	236	123	87
5	40	197	95	104	183	886	502	642	380	232	112	78
6	38	221	97	110	169	817	493	734	2850	232	102	78
7	37	956	97	122	159	753	481	1040	1510	227	94	76
8	37	782	97	127	168	702	457	749	1720	201	89	74
9	37	361	97	122	610	661	436	567	3490	183	83	73
10	37	268	97	115	1040	627	422	452	3910	164	78	70
11	37	225	98	109	734	604	1000	399	1280	150	76	68
12	37	202	e98	105	596	667	1080	362	725	142	74	66
13	38	185	103	104	831	682	785	333	568	133	74	64
14	47	173	e100	103	1900	622	594	311	488	128	72	60
15	44	163	e100	104	2560	989	559	294	452	123	72	59
16	50	156	e98	97	1530	5500	544	276	414	140	70	60
17	60	145	99	93	833	6810	521	260	376	133	71	64
18	117	139	101	94	614	2890	457	251	363	122	71	272
19	96	136	96	87	546	1320	433	247	400	115	69	932
20	72	126	e95	90	501	1090	423	244	593	107	68	964
21	57	125	97	79	455	964	414	252	2090	99	65	384
22	52	121	96	87	428	880	400	255	4020	93	59	223
23	53	118	97	84	492	809	396	243	2280	88	61	156
24	52	117	94	81	7390	744	373	238	1060	82	1350	120
25	73	116	e90	91	13000	683	355	208	915	80	734	102
26 27 28 29 30 31	292 1380 535 252 160 135	114 111 109 106 103	e85 e85 e85 e86 e86	78 95 87 100 120 157	12300 7130 1700 	643 618 609 619 599 583	337 325 311 297 285	194 186 183 181 249 349	819 513 356 321 303	624 2400 1670 694 409 269	1130 447 235 157 121 104	92 86 83 80 76
MEAN	130	228	95.1	101	2031	1215	494	354	1123	325	205	165
MAX	1380	956	103	157	13000	6810	1080	1040	4020	2400	1350	964
MIN	37	103	85	78	159	583	285	181	303	80	59	59
AC-FT	7980	13540	5850	6180	112800	74720	29390	21780	66830	20010	12630	9790

arkansas river basin 469

07182250 COTTONWOOD RIVER NEAR PLYMOUTH, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	736 6370 1986 12.3 1992	804 8861 1999 29.5 1981	479 2389 1993 31.9 1992	381 1727 1974 38.0 1981	694 2948 1973 31.9 1967	1128 7548 1973 43.0 1981	1364 5588 1999 48.2 1989	1476 8608 1993 51.2 1967	1885 9568 1965 127 1980	891 7881 1993 42.0 1980	418 2199 1985 21.4 1991	482 2654 1965 20.6 1980
SUMMARY	STATIST	ICS	FOR 2	2000 CALE	NDAR YEAR	F	OR 2001 W	ATER YE	AR.	WATER YE	EARS 1964	- 2001
	MEAN ANNUAL M ANNUAL ME			408			527			894 2701 121		1993 1991
	DAILY ME			5450	Feb 26		13000	Feb :	25	73500	Nov	2 1998
LOWEST	DAILY MEA	AN		33	Sep 19		37	Oct	4	8.7	Oct	21 1964
ANNUAL	SEVEN-DAY	MINIMUM		34	Sep 16		37	Oct	6	11	Oct	18 1964
	PEAK FLO						13200		25	92900	Nov	2 1998
	PEAK STA						31.03		25	36.78		2 1998
	ANEOUS LO						37	Oct	7	8.7	Oct .	21 1964
	RUNOFF (A	- ,		296300			381500			647500		
	ENT EXCER			935			984			1920		
	ENT EXCER			200			194			269		
90 PERC	ENT EXCER	EDS		41			71			46		



07182510 NEOSHO RIVER AT BURLINGTON, KS

LOCATION.--Lat $38^{\circ}11^{\circ}40^{\circ}$, long $95^{\circ}44^{\circ}10^{\circ}$, in SE $^{1}/_{4}$ NW $^{1}/_{4}$ sec.26, T.21 S., R.15 E., Coffey County, Hydrologic Unit 11070204, on right bank at upstream side of county highway bridge at Burlington, 0.3 mi upstream from Rock Creek, and at mile 338.4.

DRAINAGE AREA. -- 3,042 mi², includes that of Rock Creek.

PERIOD OF RECORD. -- June 1961 to current year.

MIN

AC-FT

GAGE. -- Water-stage recorder. Datum of gage is 983.56 ft above sea level.

REMARKS.--Records good. Flow completely regulated since 1963 by John Redmond Reservoir (station 07182450), 5.3 mi upstream.

Diversion of water upstream from gage for the Wolf Creek Nuclear Power Plant began Oct. 8, 1980. Records include flow of Rock Creek. Satellite telemeter at station.

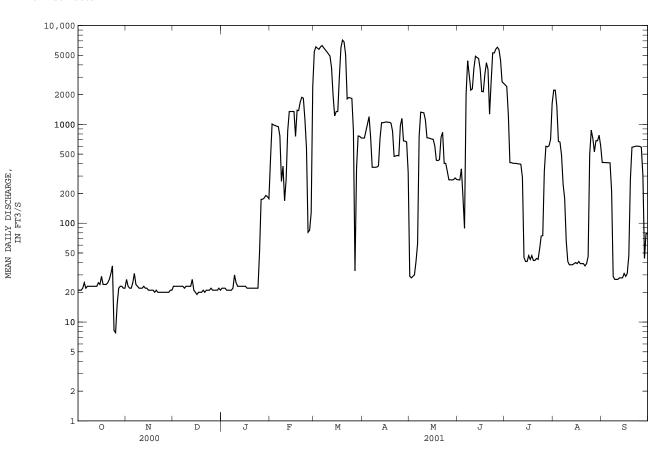
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES DAY NOV DEC JAN FEB MAY AUG SEP 2.7 2.2 22 27 1970 729 e23 e23 e23 e23 e23 18 21 20 22 1390 5950 1050 434 3200 39 47 37 20 7.8 20 361 ___ MEAN 22 8 21 9 21 8 54 0 7.8 MAX

2.7

07182510 NEOSHO RIVER AT BURLINGTON, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	1415 11540 1974 22.4 1989	1488 15410 1999 12.0 1991	1136 6925 1993 12.4 1991	791 3578 1973 17.7 1989	1018 5363 1973 17.1 1989	1883 7637 1973 13.8 1981	2422 8191 1984 21.5 1981	2636 9790 1999 44.5 1989	3377 12890 1995 162 1988	2163 7332 1969 66.0 1966	1036 10330 1993 45.0 1976	641 3771 1985 32.4 1984
SUMMARY	Y STATIST	ICS	FOR :	2000 CALENI	DAR YEAR	FC	OR 2001 WA	TER YEAR		WATER Y	EARS 1966	- 2001
	MEAN F ANNUAL ANNUAL M			489			852			1668 4982 190		1993 1991
	r daily m			6150	Mar 1		7130	Mar 19		23300	Nov	6 1998
	DAILY ME	AN Y MINIMUM		7.8 11	Oct 25 Feb 11		7.8 17	Oct 25 Oct 24		.8 4.2		28 1980 22 1980
	SEVEN-DA M PEAK FL			11	rep II		7210	Mar 19		26200		13 1961
MAXIMUN	M PEAK ST	AGE					14.84	Mar 19		31.5		13 1961
INSTANT	raneous L	OW FLOW					6.7	Oct 25		.0	0 Nov 2	28 1980
ANNUAL	RUNOFF (AC-FT)		354700			617000			1209000		
10 PERG	CENT EXCE	EDS		1480			2550			5440		
50 PERG	CENT EXCE	EDS		120			274			414		
90 PERG	CENT EXCE	EDS		21			21			26		



07183000 NEOSHO RIVER NEAR IOLA, KS

LOCATION.--Lat 37°53'27", long 95°25'50", in SW $^1/_4$ NE $^1/_4$ NE $^1/_4$ sec.9, T.25 S., R.18 E., Allen County, Hydrologic Unit 11070204, on left bank 1.0 mi downstream from Elm Creek, 3.0 mi southwest of Iola, and at mile 287.4.

DRAINAGE AREA. -- 3,818 mi².

PERIOD OF RECORD.--August 1895 to December 1903 (published as "at Iola"), October 1917 to current year. Monthly discharge only for some periods, published in WSP 1311. Figures of daily discharge for August 1895 to January 1898, published in previous reports, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1037: 1819-24, 1926-29, 1935(M). WSP 1117: Drainage area. WSP 1311: 1895-98. WSP 1391: 1896(M), 1899, 1-02(M), 1903-04.

GAGE.--Water-stage recorder. Datum of gage is 914.77 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1917, nonrecording gage at tailgate of flume at mill dam, 4.8 mi upstream at datum 12.2 ft higher.

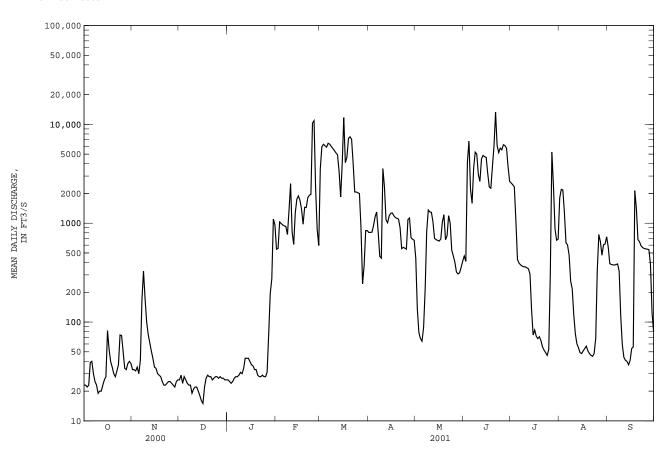
REMARKS.--Records good except those for estimated daily discharges, which are poor. Considerable regulation since 1963 by John Redmond Reservoir (station 07182450), 59.3 mi upstream. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES NOV DAY OCT DEC APR MAY JUN AUG SEP JAN FEB MAR JUL e20 1750 e18 e16 e15 e22 e26 e27 2.7 ------MEAN 35.5 54.2 24.5 MAX MIN AC-FT

07183000 NEOSHO RIVER NEAR IOLA, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1899 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	1553 15890 1942 .21 1957	1477 18520 1999 .52 1957	1017 9116 1993 1.39 1957	819 4773 1993 1.33 1957	1041 6994 1949 3.24 1957	1959 11010 1973 11.4 1956	2903 19580 1944 19.8 1981	3022 14270 1938 82.3 1967	3687 15390 1995 126 1933	2598 43540 1951 10.8 1954	1143 10700 1993 1.10 1936	1354 11140 1951 .64 1956
SUMMARY	STATIST	CICS	FOR	2000 CALE	ENDAR YEAR		FOR 2001	WATER YEAR		WATER	YEARS 189	9 - 2001
	MEAN CANNUAL ANNUAL M			636			1172			1882 6635 141		1951 1956
	DAILY M			6220	Mar 2		13300	Jun 21		344000	Jul	13 1951
LOWEST	DAILY ME	AN		15	Dec 16		15	Dec 16		. (00 Aug	19 1936
ANNUAL	SEVEN-DA	MUMINIM YA		19	Dec 10		19	Dec 10		. (00 Aug	19 1936
MAXIMUN	1 PEAK FL	WOL					16600	Feb 24		436000		13 1951
	1 PEAK ST						17			43.		13 1951
	TANEOUS L						17	Dec 9			00 4	at times
ANNUAL	RUNOFF (AC-FT)		461900			848800			1364000		
	CENT EXCE			1950			4120			5260		
50 PERG	CENT EXCE	EDS		168			377			408		
90 PERG	CENT EXCE	EDS		26			26			35		



07183500 NEOSHO RIVER NEAR PARSONS, KS

LOCATION.--Lat $37^{\circ}20^{\circ}24^{\circ}$, long $95^{\circ}06^{\circ}35^{\circ}$, in NE $^{1}/_{4}$ NW $^{1}/_{4}$ NE $^{1}/_{4}$ sec.21, T.31 S., R.21 E., Labette County, Hydrologic Unit 11070205, on right bank at downstream side of bridge on U.S. Highway 160, 0.4 mi upstream from Hickory Creek, 2.7 mi upstream from dam of Kansas Army Ammunition Plant, 8.0 mi east of Parsons, and at mile 204.1.

WATER-DISCHARGE RECORDS

DRAINAGE AREA. -- 4,905 mi².

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only October 1921, published in WSP 1311.

REVISED RECORDS. -- WSP 807: 1922-23. WSP 1391: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 810.25 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1929, nonrecording gage at bridge 0.5 mi downstream at datum 0.04 ft lower. Oct. 1, 1929, to Feb. 7, 1935, nonrecording gage, and Feb. 8, 1935, to Dec. 7, 1966, water-stage recorder at present site and datum. Dec. 8, 1966, to June 8, 1987, water-stage recorder 2.7 mi downstream at present datum.

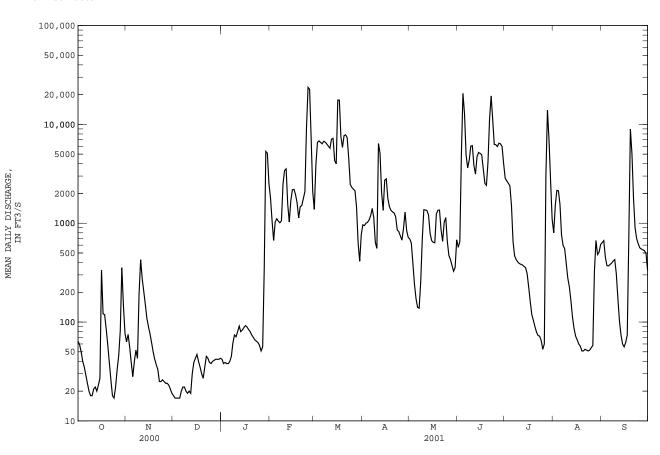
REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow moderately regulated since 1963 by John Redmond Reservoir (station 07182450), 139.6 mi upstream. Small diversion by the Kansas Army Ammunition Plant. Records include flow of Hickory Creek. Satellite telemeter at station.

		DISCHARO	GE, CUBIO	C FEET PE		, WATER Y	EAR OCTOBE	R 2000 T	O SEPTEMBI	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	e63	18	42	1810	1380	963	693	571	2850	800	637
2	59	e75	17	38	1060	3850	945	630	650	2680	1510	666
3	50	56	17	39	668	6560	1000	393	5040	2540	2150	453
4	40	39	17	38	1030	6810	1020	242	20600	2380	2130	372
5	35	28	17	38	1110	6580	1080	173	12800	1510	1550	370
6	29	40	20	40	1050	6360	1190	141	4900	657	760	382
7	24	52	22	45	1010	6740	1410	138	3640	468	595	395
8	20	43	22	62	1060	6610	1140	254	4340	429	552	414
9	18	192	20	74	2490	6320	639	689	6020	406	393	429
10	18	427	19	71	3420	6020	556	1370	6090	391	278	308
11	21	276	20	80	3550	5740	6410	1360	3830	384	227	175
12	22	205	19	91	1560	7100	5110	1340	3140	378	164	103
13	20	151	30	80	1030	7210	2060	1210	4720	366	112	74
14	23	109	39	83	1700	4300	1350	789	5190	355	86	60
15	27	90	43	88	2180	3980	2730	666	5090	310	72	56
16	336	76	47	92	2200	17600	2810	641	4910	226	66	62
17	121	62	40	89	1950	17600	1780	633	3520	161	60	74
18	119	50	e35	84	1610	7520	1470	1240	2530	119	57	728
19	85	42	e30	80	1130	5850	1350	1350	2420	104	51	8960
20	59	37	e27	74	1470	7690	1300	1360	4180	90	51	5020
21	39	33	e35	70	1510	7850	1270	860	11300	79	53	1780
22	26	25	45	66	1780	7350	1160	655	19400	73	52	899
23	18	25	43	64	2090	4510	855	1020	11200	72	51	701
24	17	26	39	62	9210	2460	822	1140	6280	65	52	619
25	22	25	38	58	23700	2300	743	657	6230	53	55	564
26	33	24	40	51	22600	2210	674	472	5960	60	58	548
27	46	24	41	56	7060	2130	886	428	6460	2980	322	538
28	82	23	42	345	2070	1450	1300	374	6340	13900	669	529
29	355	21	42	5330		631	848	327	5960	6940	482	491
30	148	19	e42	5110		412	719	356	4000	2690	510	333
31	77		43	2520		765		679		1100	610	
MEAN	66.2	78.6	31.3	486	3682	5609	1520	719	6244	1446	470	891
MAX	355	427	47	5330	23700	17600	6410	1370	20600	13900	2150	8960
MIN	17	19	17	38	668	412	556	138	571	53	51	56
AC-FT	4070	4680	1920	29870	204500	344900	90430	44190	371500	88890	28920	53040

07183500 NEOSHO RIVER NEAR PARSONS, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	2329 25520 1987 .000 1957	2305 20340 1999 .000 1957	1497 12760 1993 .000 1957	1283 7762 1973 .000 1957	1718 9492 1949 .000 1957	2971 18100 1973 8.10 1957	4345 25520 1927 18.6 1981	4387 22110 1961 282 1967	5234 20610 1995 210 1980	3637 52780 1951 10.8 1954	1374 11140 1993 .000 1936	1932 15030 1951 .90 1956
SUMMARY	STATIST	ICS	FOR	2000 CALE	ENDAR YEAR		FOR 2001	WATER YEAR	2	WATER Y	EARS 192	2 - 2001
	MEAN CANNUAL I ANNUAL M			1003			1750			2751 8611 173		1993 1953
HIGHEST	DAILY M	EAN		16000	Jun 27		23700	Feb 25	5	366000	Jul	14 1951
	DAILY ME			17	Oct 24		17	Oct 24		.00		26 1934
		Y MINIMUM		18	Nov 30		18	Nov 30		.01		26 1934
	PEAK FL						25400	Feb 25		410000		14 1951
	1 PEAK ST CANEOUS L						23. 16	.98 Feb 25 Oct 24		40.20		14 1951
	RUNOFF (727800			1267000	OCL 24	ł	1993000	J	at times
	CENT EXCE	- ,		3010			5960			8080		
	CENT EXCE			264			429			600		
90 PERC	CENT EXCE	EDS		29			29			42		



07183500 NEOSHO RIVER NEAR PARSONS, KS--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-94, 2000 to current year.

 ${\tt REMARKS.--Unpublished \ records \ of \ intermittent \ sediment \ samples \ are \ available \ on \ the \ World \ Wide \ Web \ at \ http://ks.water.usgs.gov/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linearized/linea$ nwis. Sediment samples are collected only at selected flow conditions.

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)
OCT	1015	0.0		10.0	20								
11	1015	20		19.0	30	1.6							
APR 12	1015	5190	278	19.0	657	9210							
MAY	1013	3170	270	10.0	057	2210							
23	1100	1050	487	22.0	115	326							
JUN													
04	1315	23600	173	25.5	878	55900		57	63	68	77	81	98
05	1255	11600	188	20.0	623	19500	99						
JUL													
24	1305	63	386	34.0	23	3.9							
AUG													
21	1045	48	434	28.0	38	4.9							

DATE	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	THAN .250 MM		
OCT				
11				
APR				
12				
MAY				
23				
JUN				
04	99	100	100	100
05				
JUL				
24				
AUG				
21				

07184000 LIGHTNING CREEK NEAR MCCUNE, KS

LOCATION.--Lat $37^{\circ}16^{\circ}54^{\circ}$, long $95^{\circ}01^{\circ}56^{\circ}$, in NE $^{1}/_{4}$ NE $^{1}/_{4}$ sec.7, T.32 S., R.22 E., Cherokee County, Hydrologic Unit 11070205, on right bank at downstream side of county highway bridge, 5.0 mi south of McCune, 13.0 mi southeast of Parsons, and at mile 12.6.

DRAINAGE AREA. -- 197 mi².

PERIOD OF RECORD. -- October 1938 to September 1946, October 1959 to current year.

REVISED RECORDS.--WDR KS-86-1: 1993. WDR KS-87-1: 1993.

GAGE.--Water-stage recorder. Datum of gage is 818.10 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Mar. 10, 1945, nonrecording gage and Mar. 10, 1945, to Sept. 30, 1946, water-stage recorder at present site and datum. Oct. 1, 1959, to May 26, 1960, water-stage recorder 100 ft downstream at present datum. Satellite telemeter at station.

REMARKS.--Records good. Satellite telemeter at station.

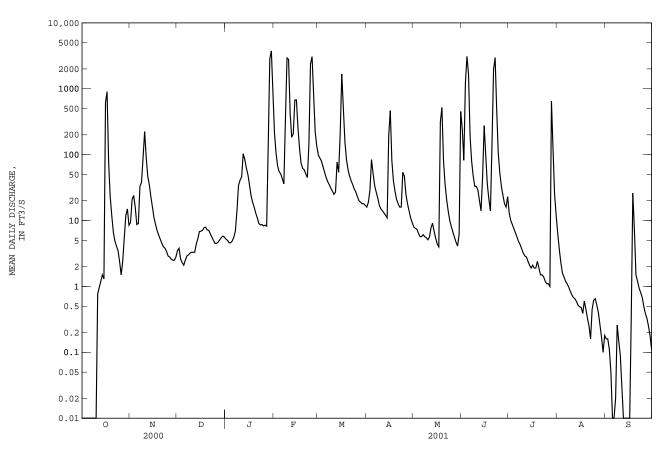
PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s and maximum (*):

Date	Tin	ne	Discharge (ft ³ /s)	e Gag	e height (ft)		Date	Time		Discharge (ft ³ /s)		height (ft)
Jan 30 Feb 10 Feb 25	090 061 120	L5	*4,280 3,400 3,220		15.69 14.64 14.15		Mar 16 Jun 4 Jun 22	1400 2215 1200	;	1,930 3,320 3,350	1	0.35 4.43 4.49
		DISCHA	ARGE, CUBI	C FEET PE	R SECOND, DAILY	WATER YE MEAN VA		R 2000 TO	SEPTEMBE	ER 2001		
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	.00 .00 .00 .00	9.4 21 24 16 8.7	3.5 3.8 2.6 2.3 2.1	5.2 5.0 4.6 4.6 4.9	212 105 67 55 51	99 89 80 66 54	16 19 29 84 52	8.0 7.6 7.4 6.4 5.7	246 82 1220 3100 1670	13 10 8.7 7.5 6.5	6.4 3.7 2.3 1.6 1.4	.16 .16 .11 .05
6 7 8 9 10	.00 .00 .00 .00	9.0 33 38 89 224	2.5 2.9 3.0 3.2 3.3	5.6 6.9 14 34 41	43 36 359 2930 2790	45 39 35 31 28	34 27 22 17 15	5.7 6.1 5.7 5.5 5.1	190 79 47 33 33	5.6 4.8 4.3 3.7 3.2	1.2 1.1 .98 .85 .75	.00 .02 .26 .15
11 12 13 14 15	.77 .96 1.2 1.5	92 47 35 23 16	3.3 3.3 4.4 5.3 6.8	46 103 85 63 50	423 184 208 674 679	25 27 77 54 210	14 13 12 11 196	5.6 7.7 9.1 6.9 5.4	29 20 14 47 275	2.9 2.8 2.4 2.1 1.9	.68 .65 .59 .52 .49	.03 .00 .00 .00
16 17 18 19 20	619 901 77 23 12	11 8.7 7.0 6.0 5.2	6.9 7.1 7.8 7.9 7.2	35 24 19 16 13	254 124 74 62 59	1680 509 158 84 59	465 81 40 28 21	4.4 4.0 313 521 82	98 36 21 14 145	2.1 1.9 1.9 2.4 1.9	.48 .39 .60 .45	.00 .34 26 7.3 1.5
21 22 23 24 25	6.7 4.9 4.1 3.5 2.4	4.5 4.0 3.8 3.4 2.9	7.1 6.3 5.6 5.0 4.5	9.0 8.6 8.7 8.3	51 45 145 2370 3070	47 40 35 30 27	18 16 16 54 47	36 21 14 10 8.1	1970 2970 481 106 53	1.5 1.5 1.4 1.2	.25 .16 .45 .62 .65	1.2 .95 .81 .68
26 27 28 29 30 31	1.5 2.4 5.5 12 15 8.5	2.8 2.6 2.5 2.5 2.8	4.5 4.7 5.1 5.5 5.8 5.6	8.5 8.2 143 2860 3760 879	832 222 136 	23 20 19 18 18	25 18 14 11 9.3	6.7 5.6 4.7 4.1 6.2 453	33 24 18 16 23	1.1 1.0 646 121 25 12	.52 .40 .26 .17 .10	.39 .33 .25 .18 .11
MEAN MAX MIN MED AC-FT	55.0 901 .00 1.5 3380	25.2 224 2.5 8.9 1500	4.80 7.9 2.1 4.7 295	267 3760 4.6 14 16430	581 3070 36 164 32250	121 1680 17 40 7420	47.5 465 9.3 20 2830	51.3 521 4.0 6.7 3160	436 3100 14 50 25970	29.1 646 1.0 2.8 1790	.94 6.4 .10 .59	1.39 26 .00 .16 82

07184000 LIGHTNING CREEK NEAR MCCUNE, KS--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN MAX (WY) MIN (WY)	186 2924 1987 .000 1939	176 907 1975 .000 1939	115 751 1993 .000 1939	102 516 1946 .000 1939	137 1033 1985 .000 1939	202 1091 1973 .000 1964	254 1700 1994 .18 1981	280 2227 1943 7.58 1988	289 1612 1995 .56 1980	95.9 1418 1992 .001 1991	41.1 488 1985 .000 1946	149 2102 1993 .000 1946
SUMMARY	STATIST	ICS	FOR 2	2000 CALENI	AR YEAR	FC	OR 2001 WA	TER YEAR		WATER YEA	ARS 1939	- 2001
LOWEST HIGHEST LOWEST ANNUAL MAXIMUM MAXIMUM	'ANNUAL I ANNUAL MI 'DAILY MI DAILY ME	EAN EAN AN Y MINIMUM OW AGE		99.3 2570 .00 .00	Jun 17 Aug 25 Aug 25		131 3760 .00 .00 4280 15.69	Jan 30 Oct 1 Oct 1 Jan 30 Jan 30 Oct 1		169 498 18.0 42400 .00 67500 19.79	Oct Oct Sep 2 Sep 2	1993 1940 25 1993 1 1938 1 1938 25 1993 25 1993 2 years
ANNUAL 10 PERC 50 PERC	RUNOFF (A ENT EXCENT ENT EXCENTENTE	AC-FT) EDS EDS		72090 190 6.3 .00			95160 192 8.5 .33			122100 269 12 .00		1



As the number of streams on which streamflow information is likely to be desired far exceeds the number of streamflow-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than streamflow-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or high-flow analyses, depending on the type of data collected.

High-flow stations

The following table contains annual maximum discharges for high-flow stations. A high-flow gage is a device that will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby complete-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lesser floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

			Water ye	ear 2001 r	naximum	Period (of record	maximum
Station name and number (fig. 3)	Location and drainage area	Period of record	Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
		Wolf River	Basin					
Buttermilk Creek near Willis, KS (06815700)	Lat 39°45′16", long 95°27′02", in SW 1/4 SW1/4 sec.30, T.3 S., R.18 E, Brown County, Hydrologic Unit 10240005, at downstream side of county highway bridge, 3.6 mi northeast of Willis. Published as "South Branch Wolf Creek tributary" 1957-60, as "South Fork Wolf River tributary" 1961. Drainage area is 3.74 mi².	1957-01	6-19-01	13.47	847	6-08-84	20.18	6,000
	Indep	endence C	reek Basir	1				
White Clay Creek at Atchison, KS (06818260)	Lat 39°33'33", long 95°07'38", in SW 1/4 NE1/4 sec.1, T.6 S., R.20 E., Atchison County, Hydrologic Unit 10240011, on right bank at center highway bridge, on 10th Street in Atchison, and 0.15 mi downstream from Brewery Creek. Drainage are is 13.1 mi ² .	of	6-20-01	13.95	3,350	6-08-82	16.07	5,410
	K	ansas Rive	r Basin					
Long Branch Draw near Norcatur, K (06845100)	Lat 39°54'06", long100°10'43", in SW S 1/4 SW1/4 sec.6, T.2 S., R.25 W., Decatur-Norton County line, Hydro logic Unit 10250011, on downstrea side of county highway bridge, 4.7 north of Norcatur. Drainage area is mi ² .	- m mi		+	+	6-15-57	26.40	2,680
Prairie Dog Creek tributary at Colby, KS (06847600)	Lat 39°23'28", long 101°02'43", in SW1/4 NW1/4 NE1/4 sec.6, T.8 S R.33 W., Thomas County, Hydrolog Unit 10250015, at downstream sidbridge on Franklin Avenue in Colby Prior to Mar. 31, 1971, at site 0.3 nupstream at same datum. Drainagarea is 7.53 mi ² .	gic e of : ni	4-07-01	12.88	498	6-18-75	27.44	4,300

⁺ Not determined.

			Water ye	ear 2001 i	maximum	Period (of record	maximum
Station name and number (fig. 3)	Location and drainage area	Period of record	Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (feet)	Dis- charge (ft ³ /s)
	Kansas	River Basi	nContinu	ied				
Elk Creek at Clyde, KS (06856320)	Lat 39°35'40", long 97°23'49", in NW 1/4 NE1/4 sec.26, T.5 S., R.1 W., Republic County, Hydrologic Unit 10250017, at downstream side of State Highway 9 bridge, 2.4 mi upstream from mouth. Drainage area is 73.0 mi ² .	1970-01	5-05-01	8.01	693	9-26-73 7-23-93		6,000 b
Big Creek trib- utary near Ogallah, KS (06863400)	Lat 38°56'00", long 99°44'33", in NW 1/4 SW1/4 sec.11, T.13 S., R.22 W Trego County, Hydrologic Unit 110260007, at downstream side of bridge on State Highway 147, 4.0 mi southwest of Ogallah. Drainage area is 4.81 mi².	. ,	9-18-01	13.49	836	3-24-87	15.20	4,100
Big Creek trib- utary near Hays, KS (06863700)	Lat 38°51'08", long 99°14'48", in SE 1/4 NE1/4 sec.7, T.14 S., R.17 W., Ellis County, Hydrologic Unit 10260007, at downstream side of culvert on old U.S. Highway 40 at Toulon, 4.7 mi southeast of Hays. Drainage area is 6.19 mi ² .	1957-01	5-30-01	11.03	140	5-29-59	13.10	1,100
Smoky Hill River tributary at Dorrance, KS (06864300)	Lat 38°50′52″, long 98°35′44″, in NE 1/4 SE1/4 sec.12, T.14 S., R.12 W., Russell County, Hydrologic Unit 10260006, at downstream end of culvert on old U.S. Highway 40 at Dorrance. Drainage area is 5.39 m		5-29-01	13.41	623	9-03-75	14.62	2,400
Coon Creek trib- utary near Luray, KS (06868300)	Lat 39°10'30", long 98°42'02" in NW 1/4 NE1/4 sec.19, T.10 S., R.12 W., Osborne County, Hydrologic Unit 10260010, at downstream side of county highway bridge, 4.4 mi south west of Luray. Drainage area is 6.5 mi ² .	1-	7-28-01	19.21	1,710	7-02-82	21.13	4,210
Mulberry Creek near Salina, KS (06869950)	Lat 38°50'40", long 97°40'05", in SW 1/4 SW1/4 sec.9, T.14 S., R.3 W., Saline County, Hydrologic Unit 10260010, at left downstream pier of bridge on county highway, 2.0 mi downstream from Spring Creek, 2.0 mi west of Salina, and 9.0 mi up stream from mouth. Drainage area 261 mi ² .)-	3-11-01	14.24	1,090	5-28-95	27.14	8,440
Ash Creek trib- utary near Stockton, KS (06873300)	Lat 39°26′15″, long 99°22′16 ″ in SE 1/4 SW1/4 sec.18, T.7 S., R.18 W., Rooks County, Hydrologic Unit 10260014, at upstream end of culvert on old U.S. Highway 24, 5.3 mi west of Stockton. Drainage area is 0.89 mi².	1957-01	5-29-01	10.65	40	5-12-93	15.54	530

			Water ye	ear 2001 r	maximum	Period (of record	maximum
Station name and number (fig. 3)	Location and drainage area	Period of record	Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
	Kansa	s River Bas	inContinu	ied				
Mud Creek at Abilene, KS (06877120)	Lat 38°55'47", long 97°13'39", in NE 1/4 NE1/4 sec.17, T.13 S., R.2 E., Dickinson County, Hydrologic Unit 10260008, at downstream side of bridge on old U.S. Highway 40 on north edge of Abilene. Drainage area is 87.0 mi².	1970-01	6-06-01	11.85	2,830	11-04-98	17.73	15,000
Mill Creek trib- utary near Washington, KS (06884300)	Lat 39°48'48", long 97°00'30", in SW 1/4 SW1/4 sec.5, T.3 S., R.4 E., Washington County, Hydrologic Unit 10270207, at downstream end of culvert on U.S. Highway 36, 2.2 mi east of Washington. Drainage a is 3.20 mi ² .	i	8-23-01	15.40	603	6-18-83	19.90	2,500
Cedar Creek near Manhattan, KS (06887200)	Lat 39°15'31", long 96°33'48", in NE 1/4 NE1/4 sec.19, T.9 S., R.8 E., Pottawatomie County, Hydrologic Unit 10270205, at downstream sid of county highway bridge, 5.5 mi north of Manhattan. Drainage area is 13.4 mi ² .		2-25-01	15.67	1,570	6-27-99 7-17-93		12,000
Indian Creek near Topeka, KS (06889550)	Lat 39°07'27", long 95°39'05", in SE 1/4 SE1/4 NE1/4 sec.5, T.11 S., R. E., Shawnee County, Hydrologic U 10270102, 3.0 mi north of Topeka, mi uptream from Soldier Creek (ne channel). Drainage area is 9.72 m	16 nit 2.7 w	9-17-01	13.39	1,530	7-27-81 6-28-99		2,700 3,400
Shunganunga Creek at Topeka, KS (06889630)	Lat 39°01'54 ", long 95°40'57", in SW 1/4 SE1/4 SW1/4 sec.6, T.12 S., F 16 E., Shawnee County, Hydrologi 10270102, on downstream side of bridge on U.S. Highway 75, 700 ft north of 21st Street in Topeka. Dra age area is 33.5 mi ² .	R. C	6-17-01	14.60	2,900	7-20-73 7-09-93		3,300 3,200
	(Osage Rive	r Basin					
South Fork Pottawatomie Creek tributary near Garnett, KS (06914250)	Lat 38°14'00", long 95°14'52", in NW 1/4 SE1/4 sec.7, T.21 S., R.20 E., Anderson County, Hydrologic Unit 10290101, above culvert on U.S. Highway 59, 3.1 mi south of Garne Drainage area is 0.35 mi ² .		2-23-01	10.72	82	6-21-67	14.98	600
Big Bull Creek at Paola, KS (06915100)	Lat 38°34'36", long 94°53'44", in NW 1/4 NE1/4 NW1/4 sec.17, T.17 S., R.23 E., Miami County, Hydrologic Unit 10290102, on downstream sic of bridge on county highway (exter sion of Peoria Street), 0.5 mi west of Paola, and 9.0 mi upstream from mouth. Drainage area is 230 mi ² .	; le ı- of	3-15-01	11.41	2,580	10-11-73	25.18	39,000

			Water ye	ear 2001 i	maximum	Period (of record	maximum
Station name and number (fig. 3)	Location and drainage area	Period of record	Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
	Osag	e River Basi	nContinu	ed				
Marmaton River tributary near Fort Scott, KS (06917400)	Lat 37°47'26", long 94°47'47", in SE 1/4 SE1/4 SE1/4 sec.8, T.26 S., R 24 E., Bourbon County, Hydrologi Unit 10290104, at downstream sic of county highway bridge, 6.0 mi southwest of Fort Scott. Drainage area is 2.80 mi ² .	t. c de	2-24-01	12.88	712	9-14-98	17.23	2,160
	A	rkansas Riv	er Basin					
White Woman Creek tributary near Selkirk, KS (07138600)	Lat 38°31'30", long 101°37'16", in \$ 1/4 SW1/4 sec.34, T.17 S., R.39 W., Greeley County, Hydrologic Unit 11030002, at downstream sic of county highway bridge, 5.6 mi northwest of Selkirk. Drainage area is 38.0 mi ² , of which 7.59 m is contributing.	de		+	+	7-09-72	13.06	1,000
Arkansas River tributary near Dodge City, KS (07139700)	Lat 37°42'52", long 100°00'53", in S 1/4 NE1/4 sec.11, T.27 S., R.25 V Ford County, Hydrologic Unit 11030004, at downstream side of culvert on U.S. Highway 283, 2.6 south of Dodge City. Prior to Mar 1, 1959, above culvert 175 ft north of present site at same datum. R ords for 1957-58 discredited. Drainage area is 8.66 mi ² .	wi	5-04-01	14.05	379	9-12-97	16.32	1,730
Little Cheyenne Creek tribu- tary near Claflin, KS (07143100)	Lat 38°27'25", long 98°32'08", in NE 1/4 SE1/4 sec.28, T.18 S., R.11 W Barton County, Hydrologic Unit 11030011, at culvert on county hi way, 4.7 mi south of Claflin. Published as "Cheyenne Creek tributa 1957-70. Drainage area is 1.48 m	/., gh- ary"	9-18-01	13.20	112	6-22-81	12.82	570
Whitewater River tributary near Towanda, KS (07147020)	Lat 37°51'03", long 97°03'37", in NE 1/4 NE1/4 sec.26, T.25 S., R.3 E Butler County, Hydrologic Unit 11030017, at culvert on county hi way, 5.0 mi northwest of Towanda Drainage area is 0.17 mi ² .	gh-	5-03-01	+	+	6-09-95	16.59	540
Cedar Creek tributary near Cambridge, KS (07147990)	Lat 37°19'19 ", long 96°37'33", in NI 1/4 NE1/4 SE1/4 sec.26, T.31 S., R.7 E., Cowley County, Hydrologi Unit 11060001, at downstream sic of bridge on U.S. Highway 160, 0. mi upstream from Cedar Creek, a 2.1 mi northeast of Cambridge. P lished as "Grouse Creek tributary 1961-63. Drainage area is 2.41 n	c de 5 and ub-	2-23-01	9.05	92.8	6-21-77	14.42	3,000

			Water ye	ear 2001 r	maximum	Period (of record	maximum
Station name and number (fig. 3)	Location and drainage area	Period of record	Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
	Arkansas	River Bas	sinContin	ued				
Cimarron River tributary near Satanta, KS (07156700)	Lat 37°16'15", long 100°55'36", in NW 1/4 NE1/4 sec.17, T.32 S., R.33 W., Seward County, Hydrologic Unit 11040006, 27 ft upstream from culvert under county highway, 12.0 mi southeast of Satanta. Drainage are is 2.41 mi ² .		6-08-01	10.99	25	9-23-62	14.12	2,040
Sandy Creek near Yates Center, KS (07166200)		1957-01	2-23-01	16.16	997	7-12-72	19.80	3,000

		WAILIN QU	AUIII DAI	A, WAIDK ID	AR OCTOBER 2000 TO L	ומכוויומד במכ	C 2001		
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
				Big Nema	ha River Basin				
	(06814000	TURKEY C	NR SENECA,	KS (LAT 39 56 52N I	LONG 096	06 30W)		
OCT 2000					JUL 2001				
19	0805	.28		12.0	12 25	1240	4250	149	21.5
JAN 2001 08	1145	2.3		0	AUG	1240	84	602	27.0
MAY 30	1145	528	300	17.5	08 SEP	1405	41	681	29.5
30 31	1450 1530	886 884	327 281	17.5 15.5	17	1150	8710		18.0
31	1530	004	201		Di e e Denie				
	0.54	244222			River Basin	1			
	068	844900 SF	SAPPA C	NR ACHILLES	, KS (LAT 39 40 37)	N LONG I)O 43 18W)		
MAR 2001 06	1525	.26	333	4.5	JUN 2001 12	1015	.13	1070	25.5
APR 18	1350	.03	1180	22.0	JUL 17	1515	.01	1190	34.0
MAY 29	1325	6.1	300	17.0					
30 31	0915 1750	117 9.1	161 332	15.5 21.5					
	(06845000	SAPPA C N	R OBERLIN,	KS (LAT 39 48 45N I	LONG 100	32 00W)		
OCT 2000				·	MAY 2001		•		
18	0835	0		15.0	30	1500	78	216	15.5
NOV 28	1400	.01	1360	0	JUN 12	1535	.97	1200	24.0
MAR 2001 07	1240	.98	623	0	JUL 18	0845	.13	939	23.0
APR 18	1615	.06	973	17.0	AUG 21	1525	.05	990	25.0
19	0935	.06		10.5					
		06845110	SAPPA C	NR LYLE, K	S (LAT 40 00 00N LO	ONG 099 5	59 35W)		
OCT 2000	1210		1100	14.0	JUN 2001	1440		020	10.0
19 NOV	1310	.57	1120	14.0	$_{\rm JUL}^{14\ldots}$	1440	7.7	932	19.0
30 JAN 2001	0900	2.8	795	0	19 AUG	1340	1.8	791	25.0
24 MAR	1040	2.9	846	.5	22 SEP	1245	1.5	838	21.0
09 APR	0910	68	286	2.0	26	1125	1.6	655	12.0
20	0900	8.5	891	12.5					
	(06846000	BEAVER C	AT LUDELL,	KS (LAT 39 50 53N I	LONG 100	57 40W)		
MAY 2001	1740	2 2	202	15.0	JUL 2001	1000	20	150	20 5
30	1740	2.2	393	17.0	24	1200	20	172	20.5
	0684	46500 BEA	VER C AT	CEDAR BLUFF	S, KS (LAT 39 59 06	5N LONG 1	LOO 33 35W)	
MAR 2001 07	0845	3.8	209	0					
	06847900	PRAIRIE D	OG C AB K	EITH SEBELI	US LAKE, KS (LAT 39	9 46 13N	LONG 100	06 00W)	
OCT 2000			_		APR 2001	- 15 -			
18 NOV		.03	7	10.0	19 MAY	1435	6.3	776	16.0
29 JAN 2001	1330	2.0	752	0	31 JUL	1415	310	189	16.0
24	1510	2.7	717	0	18	1325	.35	765	25.5
FEB 26	1200	22	311	0	AUG 23	1400	.36	741	22.0
MAR 08	1450	18	478	3.0					

		WATER-Q	JALITY DA'	TA, WATER YEA	R OCTOBER 2000 TO	SEPTEMBE	R 2001		
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
			1	Kansas River	BasinContinued				
	068	848000 PI	RAIRIE DO	G C AT NORTON	, KS (LAT 39 48 3	6N LONG	099 55 18W)	
OCT 2000					JUN 2001				
20 NOV	0845	.31	747	11.0	$^{\tt JUL}_{\tt JUL}$	0930	.20	693	17.0
29 JAN 2001	0935	.44	647	0	03 19	1200 0915	59 80	642 633	25.0 26.0
25 MAR	0940	.37	640	0	AUG 23	0940	79	624	24.0
08 APR	0855	.64	631	.5					
20	1230	.30	668	15.0					
	068	48500 PR	AIRIE DOG	C NR WOODRUF	F, KS (LAT 39 59	09N LONG	099 28 39	W)	
OCT 2000 19	0930	.83	1070	11.5	MAY 2001 07	1405	50	730	14.5
NOV 30	1300	5.5	996	0	JUN 21	1425	5.5	1060	19.0
JAN 2001 25	1315	6.4	950	0	JUL 05	1150	831	320	19.5
MAR 14	1025	26		.5	20 AUG	1215	11	832	25.0
APR 04	1350	8.5	904	9.5	08 24	1440 0915	4.0 43	765 302	24.5 19.5
			REPUBLICA	N R NR HARDY,			97 55 53W)		
OCT 2000	0.		0221012		JUN 2001	2. 201.0 0	, 33 33,		
27 JAN 2001	1230	29	716	16.5	01 JUL	0955	1070	397	18.0
02 MAR	1245	22	850	0	19 SEP	0910	297	508	25.0
20 APR	1415	359	655	9.5	04	1255	96	762	28.0
24	1405	227	675	19.5					
	068	53800 WH	ITE ROCK	C NR BURR OAK	, KS (LAT 39 53 5	5N LONG	098 15 05W)	
NOV 2000	1000	1 7	1100	0	JUL 2001	1.400	2 2	1000	20.0
21 MAR 2001	1220	1.7	1100	0	18 30	1400 1340	3.3 86	1080 441	28.0 29.0
28 APR	1015	17	1000	5.0	SEP 05	0840	2.3	1150	22.0
25 MAY	0855	14	922	13.0					
31	1730	314	362	16.0	(0			
	068	54000 WH	ITE ROCK (C AT LOVEWELL	, KS (LAT 39 53 1	.UN LONG	098 01 20W)	
APR 2001 24	1630	.06	968	17.0	SEP 2001 04	1610	.11	655	25.0
JUN 13	1345	99	542	24.0					
	068	56000 RE	PUBLICAN 1	R AT CONCORDIA	A, KS (LAT 39 35	25N LONG	097 39 32	W)	
OCT 2000					JUN 2001				
25 DEC	1320	43	820	17.5	05 JUL	1015	2250	409	16.5
04 22	1320 1030	40 15	1090 	0	03 AUG	1240	309	690	29.0
MAR 2001 27	1525	366	824	8.0	21	1645	270	707	26.0
MAY 04	0735	249	812	14.5					
					ER, KS (LAT 39 21	20N LON	3 097 07 3	4W)	
OCT 2000					MAY 2001			• •	
26 NOV	1515	65	786	18.0	03 JUN	1555	292	805	19.5
28 DEC	1150	66	1080	3.0	06 JUL	1425	7850	308	19.0
19 FEB 2001	1130	20	1300	0	03 AUG	1000	395	710	27.0
22 MAR	1030	133	880	0	16	1250	276	740	27.0
MAR 27	1200	504		8.0					

		WAIEK-QC	JAHIII DA	IA, WAIER IEA	R OCTOBER 2000 TO .	DEF LEMDE	K 2001		
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)		DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C)
				Kansas River	BasinContinued				
	0685	7100 REPU	JBLICAN R	BL MILFORD D	AM, KS (LAT 39 04	15N LONG	G 096 52 0	OW)	
OCT 2000					MAR 2001				
25 NOV	1700	36	673	17.0	09 JUL	1330	2050	747	3.5
07 DEC	1430	15	594	5.0	19 SEP	1015	101	615	26.0
27 JAN 2001	1255	210	674	0	20	1100	840	582	21.0
18 24	1600 0820	307 212	611 701	1.0 1.5					
	068	860000 SM	MOKY HILL	R AT ELKADER	, KS (LAT 38 47 3	3N LONG	100 51 19W)	
OCT 2000					JUL 2001				
17 24	1055 1100	.03 .13	2480 2400	12.5 15.5	03 30	1010 1120	.05 60	2800 390	22.5 27.5
JAN 2001 23	1020	.11	1850	0	AUG 17	1015	6.6	830	23.0
MAR 06	1000	1.1		5.0	22	0925	1.1	1490	22.0
MAY 15	1110	1.0	1300	21.0					
	068	861000 SM	MOKY HILL	R NR ARNOLD,	KS (LAT 38 48 31	N LONG 1	00 01 13W)		
OCT 2000					JUL 2001				
11 JAN 2001	1025	.94	1440	9.5	11 30	1225 1110	.81 464	1500 364	31.5 29.5
22 MAR	1045	2.2	1590	3.0	AUG 01	1135	263	390	26.0
05 APR	1030	2.9	1630	7.0	06 SEP	1135	46	895	27.5
10 MAY	1215	3.8	1690	19.0	05	1145	2.2	1580	25.0
22	1045	5.5	1750	16.0					
	0686	2700 SMOK	CY HILL R	NR SCHOENCHE	N, KS (LAT 38 43)	30N LONG	099 23 30	W)	
NOV 2000 02	1340	11	1560	13.0	JUN 2001 07	1030	79	1070	19.5
JAN 2001 04	1110	8.8	1450	3.0	JUL 02	1520	7.3	1490	29.5
FEB 16	1415	16	1510	1.5	AUG 09	1040	.47	1570	24.0
MAR 08	1000	13	1580	7.0	SEP 18	1410	1800	320	18.0
APR 10	1415	10	1680	20.0	21	1430	55	1250	22.0
	0686	2850 SMOK	KY HILL R	BL SCHOENCHE	N, KS (LAT 38 42	16N LONG	099 17 30	W)	
NOV 2000 03	1330	10	1570	13.0	JUN 2001 19	1405	29	1400	23.5
JAN 2001 05	1415	9.7	1330	0	JUL 02	1105	9.9	1470	27.5
FEB 01	1355	9.8	1520	4.0	AUG 09	1300	.29	1530	30.5
MAR 05	1410	18	1520	9.0	SEP 18	1200	1970	280	
APR 09	1420	12	1690	21.0	21 27	1430 1420	84 24	1090 1450	22.0 21.5
03	1120				(LAT 38 48 45N LOI			1150	21.5
OCT 2000		0000000	200	1111 1111107 110	MAY 2001		2 1117		
19	1340 0925	3.0 191	1130 557	16.0 17.0	07 24	1310 1350	98 27	940 1250	17.0 13.0
DEC 19	1400	11	1360	0	31 JUL	0945	797	325	16.0
JAN 2001 31	1410	16	1070	2.0	03 AUG	1500	21	1220	27.0
MAR 02	1415	28	1150	3.0	10 22	1405 1350	12 8.0	1170 1200	23.5 26.0
APR 17	1340	19	1310	13.0	SEP 20	1400	920	1900	18.0
,				- · ·	21	1420	329	2500	18.0

		miiibit go		,	100102210 2000 10 1	JUL 1011001	. 2001		
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
			F	Kansas River	BasinContinued				
	06864	1050 SMOK	Y HILL R	NR BUNKER HI	LL, KS (LAT 38 47	38N LONG	9 098 46 5	(WO	
OCT 2000 25 JAN 2001	1405	26	2640	19.0	JUN 2001 06	1045	3610 119	334 2020	17.0
18	1400	21	2130	1.5	27 JUL	1355			28.5
MAR 29	1000	53	1970	10.5	25 SEP	1030	41	2280	29.5
APR 26	1350	132	1780	22.0	07	1415	20	2580	22.5
20									
	0686	54500 SMC	KY HILL F	R AT ELLSWORT	TH, KS (LAT 38 43)	36N LONG	098 14 00	W)	
NOV 2000 09 JAN 2001	1245	53	1870	8.5	JUN 2001 22 AUG	0935	309	1600	21.0
31	1510	111	1810	3.0	01	1100	172	940	27.0
MAR 22	0915	117	1750	13.0	SEP 25	1610	493	751	17.0
APR 23	1050	3500		12.5					
			10163V 11TT T		, KO (IND 20 26 26	ON LONG (007 57 0414	,	
	068	365500 SM	OKY HILL	R NR LANGLEY	7, KS (LAT 38 36 38	SN LONG (19/5/04W)	
OCT 2000 12 JAN 2001	1000	40	1180	14.0	JUN 2001 12 JUL	1155	2440	637	21.0
31	1125	50	1190	6.0	12 AUG	1255	165	941	28.0
MAR 16	1140	249	1070	5.0	02	0930	123	1000	28.0
APR 30	1530	888	1090	16.0	SEP 25	1235	1080	821	17.5
	069	REEDO CIM	ו דע שדוד	D NID MENTIOD	KS (LAT 38 47 54		7 2/ 20W1		
	000	100500 SM	OKI HILL	R NR MENIOR,		N LONG US	77 34 20W)		
OCT 2000 24 DEC	1225	76	1010	19.0	JUN 2001 06 JUL	0905	1000	984	19.5
06 JAN 2001	1205	62	1020	1.0	10 AUG	0830	218	1100	26.0
17	1205	68	984	0	21	0810	120	1040	23.0
MAR 09	1005	252	1100	4.5					
	06	866900 S	ALINE R N	IR WAKEENEY,	KS (LAT 39 06 22N	LONG 099	9 52 10W)		
OCT 2000 30 DEC	1455	.80	1000	17.0	MAY 2001 01 JUN	1500	6.4	980	24.0
08	1430	1.3	980	5.0	01	1140	73	372	19.0
JAN 2001 09	1315	2.2	1030	3.0	12 JUL	1005	13	999	23.0
FEB 20	1420	8.5	980	1.0	12 27	1025 1115	.64 133	1040 266	24.5 23.5
MAR 30	1400	8.4	860	13.0	SEP 27	1435	12	670	18.0
30								070	10.0
	(06867000	SALINE R	NR RUSSELL,	KS (LAT 38 58 00N	LONG 098	3 51 20W)		
NOV 2000 08	1340	32	2640	7.0	JUN 2001 05	1220	899	920	16.0
JAN 2001 26	1400	54	2600	2.5	09 JUL	1005	2840	680	19.0
MAR 29	1345	60	2120	15.0	25 AUG	1030	38	3000	27.0
MAY					21	1535	38	2990	30.0
01	1005	48	2430	20.5	SEP 06 19	1455 1345	29 175	3280 738	28.0 20.0
					17	1010	113	, 50	20.0

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DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)
				Kansas River	BasinContinued				
	06	868200 SA	LINE R A	T WILSON DAM	I, KS (LAT 38 58 351	I LONG 0	98 29 20W)		
OCT 2000					MAY 2001				
18 NOV	1350	8.0	2500	20.0	23 JUN	1320	213	2470	20.0
28 JAN 2001	1240	9.6	2410	7.5	13 JUL	1115	1320	2370	23.0
22	1440	9.8	2430	7.0	11	1055	26	2220	26.5
MAR 14	1140	11	2590	6.5	AUG 17	1040	54	2240	25.5
APR 18	1105	21	2270	14.0					
		06869500	SALINE R	AT TESCOTT,	KS (LAT 39 00 15N	LONG 09	7 52 26W)		
OCT 2000					APR 2001				
11 NOV	1050	23	2280	8.0	23 JUN	1500	1180	430	14.0
29 FEB 2001	1210	34	2160	3.0	21 AUG	1130	1530	2210	22.0
01 MAR	0855	53	1940	0	17 SEP	1100	77	2080	25.5
21	1025	59	1610	9.5	26	0925	90	999	14.5
	0687	0200 SMOK	Y HILL R	AT NEW CAME	RIA, KS (LAT 38 51	49N LONG	G 097 28 5	8W)	
OCT 2000	0055	100	1260	10 5	MAY 2001	1015	1010	909	20.5
24 DEC	0955	128	1260	18.5	09 JUN	1215	1810		
06 JAN 2001	1500	125	1320	0	14 JUL	1430	3170	1320	21.0
17 MAR	1445	160	1280	1.0	10 AUG	1220	396	1460	27.0
28	1450	455	1240	9.5	21	1020	225	1530	26.0
	1	06870300	GYPSUM C	NR GYPSUM,	KS (LAT 38 39 11N I	LONG 097	25 10W)		
OCT 2000 23	1735	3.8	1010	19.0	MAY 2001 30	1700	159	458	18.0
DEC 06	0920	8.4	736	0	JUL 09	1850	2.9	991	26.0
JAN 2001 17	0925	11	671	1.0	AUG 16	1800	.78	1310	26.0
MAR 08	1105	20	871	7.5	SEP 18	1230	239	237	18.0
					, KS (LAT 39 40 40N				
OCT 2000	· ·	0071000 1	5020110	., 02122	APR 2001	. 20110 0	20 2011,		
27	1020	1.1	1470	14.0	30	1450	19	1080	23.0
NOV 02	1020	3.7	1390	12.0	MAY 07	1015	103	590	14.0
20 JAN 2001	1020	3.8		0	JUN 13	1100	22	990	24.0
18 FEB	1205	6.9	1190	0	29 JUL	1010	7.2	1180	24.0
16 26	1305 1100	9.4 34	1030 628	0	24 30	1320 1135	1.5 101	1280 250	34.0 29.5
MAR 28	1330	26	974	12.0	SEP 25	1455	12	660	17.0
		06871500	BOW C N	R STOCKTON,	KS (LAT 39 33 46N I	LONG 099	17 04W)		
OCT 2000 17	1300	3.1	1210	15.0	JUN 2001 13	1330	11	1080	24.5
JAN 2001 18	1425	9.6	468	0	JUL 24	1515	2.6	1320	29.5
FEB 16	1035	5.7	870	0	AUG 10	1010	60	245	16.5
26	1310	26	696	0	SEP 05		1.7	1700	25.0
MAR 28	1000	11	952	7.5	UĐ	1440	1./	1/00	∠5.0
APR 30	1145	9.4	974	20.0					

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DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)
			F	Kansas River	BasinContinued				
	068	871800 NF	SOLOMON	R AT KIRWIN	, KS (LAT 39 39 36N	LONG 09	9 06 55W)		
OCT 2000 20	1330	.48	908	18.0	JUN 2001 21	1110	.02	930	19.0
DEC 06	1525	.01	863	4.0	JUL 06	1125	.06	1060	23.5
JAN 2001 08	1110	.01	850	0	AUG 20	1245	.10	1040	21.5
MAY 10	1130	.01	888	20.5					
					VC /INT 20 22 1EM	TONG OF	10 A1 21W1		
	068	5/2500 NF	SOLOMON	R AI PORIIS	, KS (LAT 39 33 15N	LONG US	78 41 31W)		
OCT 2000 11	1540	18	1070	13.0	MAY 2001 31	0930	1200	441	15.5
NOV 27	1500	31	1240	3.5	JUL 24	0930	44	1050	26.5
FEB 2001 06	1250	37		4.0	31 SEP	0900	132	427	25.5
MAR 19	1400	104	999	6.5	06	0855	23	1090	21.0
APR 26	0905	60	1180	16.0					
20					/ 20 00 0	C11 T 017G	000 24 54		
	06873	3000 SF S	OLOMON R	AB WEBSTER I	RE, KS (LAT 39 22 2	6N LONG	099 34 54	W)	
OCT 2000 26 NOV	1100	.38	1610	15.0	MAY 2001 01 07	1430 1050	24 143	1360 1140	23.5 14.5
24 JAN 2001	1000	3.7	1500	0	JUN 21	1100	34	1350	24.0
03 FEB	1340	6.0	1470	0	JUL 12	1320	3.4	1440	35.0
06	1040	20	1170	4.0	AUG				
MAR 30	1140	35	1130	14.5	02 SEP	1110	23	1090	30.0
					25	1235	16	1020	18.5
	06873	3200 SF S	OLOMON R	BL WEBSTER I	RE, KS (LAT 39 24 3	4N LONG	099 24 53	W)	
APR 2001 25	1415	.07	1470	24.0	JUL 2001 03	1045	151	1350	24.0
MAY 11	1205	.18	1070		05 25	1040 1435	145 149	1310 1330	24.5 34.0
JUN 20	1320	.19	1170	19.0	SEP 24	1440	.29		21.5
					N, KS (LAT 39 26 23)	
NOV 2000					MAY 2001				
02 JAN 2001	1325	2.6	1490	12.5	01	1115 1110	10 94	1980 1950	23.5 15.0
18	1040	4.9	1620	0	07 JUN				
FEB 20	1000	5.7	1740	1.0	25 JUL	1120	9.6	2150	26.0
MAR 29	1025	14	1890	11.0	25 SEP	1250	50	1310	28.0
					25	1600	6.6	1620	21.0
	068	874000 SF	SOLOMON	R AT OSBORNI	E, KS (LAT 39 25 43	N LONG C	98 41 40W)	
OCT 2000 11	1410	13	1170	11.5	MAY 2001 30	1435	2100	220	17.5
NOV 27	1130	18	1430	3.0	31 JUN	1325	585	480	15.0
FEB 2001	1515	23		4.0	19 JUL	1110	101	1870	21.0
06 MAR					24	1220	18	1300	33.0
19 APR	1045	31	1550	7.0	SEP 06	1115	27	1390	23.0
26	1135	27	1610	20.0					

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DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
				Kansas River	BasinContinued				
	068	375900 S	OLOMON R	NR GLEN ELDER	., KS (LAT 39 28 27	N LONG	098 16 58W)	
OCT 2000					JUN 2001				
12	1000	30	1070	14.0	14	1205	1160	992	22.0
FEB 2001 06	0905	20		2.5	JUL 24	1500	101	1030	30.0
APR 25	1520	12	1130	19.5	AUG 07	1450	132	1060	30.0
	06	876070 :	SOLOMON R	NR SIMPSON,	KS (LAT 39 22 05N	LONG 09	7 55 44W)		
OCT 2000					APR 2001		•		
16	1340	30	1780		25	1200	29		17.5
NOV 30	0845	30	1930	.5	JUN 14	0845	1020	1060	21.5
JAN 2001 02	1350	26	1960	0	JUL 24	1110	55	1380	29.5
FEB 05	1450	38		.5	SEP 05	1235	33	1540	25.5
MAR 20	0855	34	1660	11.0					
20	0033				(LAT 39 08 30N LON	70 007 F	0 1011		
		068767	UU SALI	C NR ADA, KS	,	G 09/ 5	J 10W)		
OCT 2000 11	1405	1.1	3180	12.0	APR 2001 24	0915	114	790	19.0
NOV 29	1450	6.6	2460	3.5	JUN 21	1535	30	1600	22.5
FEB 2001 05	1100	18		0	AUG 17	1350	2.8	2560	24.5
MAR					SEP				
21	1345	21	2680	11.0	26	1300	11	1340	14.5
	C	16876900	SOLOMON	R AT NILES, K	S (LAT 38 58 08N L	ONG 097	28 34W)		
OCT 2000 24	1540	68	1640	19.5	MAR 2001 08	1525	234	989	6.0
JAN 2001 16	1430	102	1670	0	AUG 20	1600	100	2720	27.0
10									27.0
	00077	600 SMOI	KI HILL K	AI ENIERPRIS	SE, KS (LAT 38 54 2	4N LONG	09/ 0/ 12	w)	
OCT 2000 31	1125	337	1690	16.0	JAN 2001 23	1230	305	2000	1.0
DEC 07	1020	251	1990	1.0	AUG 20	1305	370		26.5
	06	878000	CHAPMAN C	NR CHAPMAN.	KS (LAT 39 01 52N		7 02 24W)		
OCT 2000			011111111	1111 011111111,	JUN 2001	20110 03	, 02 2111,		
25	1420	21		19.0	12	1145	38	900	22.0
DEC 05	1420	16	1020	0	JUL 11	1540	16	1050	28.0
JAN 2001 18	1100	22		0	24 AUG	1310	15	1220	28.0
MAR 21	1500	55	630	11.5	17 24	1315 1230	11 2900	1160 90	24.0 19.0
MAY 11	0910	32	796	21.5	21	1230	2500	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	17.0
11					***		26 46 22**		
	068	379100 K	ANSAS R A	T FORT RILEY,	KS (LAT 39 03 09N	LONG U	96 46 33W)		
OCT 2000 26	1150	432	1800	16.0	MAR 2001 30	1045	2110	1500	8.5
DEC 07	1355	371	1800	2.0	JUN 08	1015	6320	904	22.0
JAN 2001 23	1525	647	1510	2.0	SEP 11	0925	1530	1090	21.0
۵۶								1090	21.0
	06	1879650 I	KINGS C N	K MANHATTAN,	KS (LAT 39 06 07N	LONG U9	o 35 42W)		
MAR 2001 04	1300	.65	482	5.0	JUL 2001 09	1320	1.3	342	28.0

		WAIER-Q	UALIIY DA	IA, WAIER YE	AR OCTOBER 2000 TO	PELIFMBE	R 2001		
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)
			F	Kansas River	BasinContinued				
	060	00E10 DT	ת סווום ס	ATT MADAGATTT	E, KS (LAT 39 50 3	ON LONG	006 20 20W	. \	
	0000	02310 61	G DLUE K A	AI MARISVILL	E, NS (LAI 39 30 3	ZIV LIOING V	U90 39 39W	,	
OCT 2000	1220	104	600	10.0	MAY 2001	0050	0010	100	10.0
23 DEC	1330	194	692	19.0	22 24	0950 1030	8810 2130	182	18.0 15.0
29	0945	195	878	0	JUN			000	
APR 2001 30	1335	404	505	22.0	04 AUG	1315	11600	220	18.0
					22	1520	254	805	29.0
	0.0	6884200 1	мтт.т. С ат	WASHINGTON	KS (LAT 39 48 50N	TONG 09	7 02 2011		
	01	0004200	MIDD C AI	WASHINGTON,	100 OF CC 1ALL) CM	HONG 05	/ 02 20W)		
OCT 2000 23	1120	3.3	467	17.0	JUN 2001 04	0940	1510	265	15.0
DEC	1120	3.3	407	17.0	06	0930	3370	223	16.0
20	1100	5.2	620	0	28	1045	27	693	25.5
MAR 2001 26	1030	34		5.5	JUL 12	1505	15	590	28.0
APR					AUG				
25 MAY	1450	58	427	19.0	22	0905	8.4	751	24.0
31	1130	246	382	16.5					
		06884400	I. BLIE R	NR BARNES	KS (LAT 39 46 33N	LONG 096	51 29W)		
	,	0004400	I DIOE K	INIC DARCHED,		LONG 070	31 ZJW)		
OCT 2000 24	1040	134	570	18.0	JUN 2001 06	1145	7920	180	17.0
DEC	1040	134	370	10.0	15	1015	13900	151	22.0
01	1015	168	697	0	JUL 12	1125	267	615	
26 APR 2001	1040	108	700	U	AUG	1135	367	645	
06	1015	425	964	13.0	22	1130	146	650	25.5
MAY 01	1505	256	605	24.5					
22	1345	2950	204	16.5					
	0688550	00 BLACK	VERMILLIO	ON R NR FRAN	KFORT, KS (LAT 39	41 03N L	ONG 096 26	15W)	
								,	
OCT 2000 24	1415	9.0	550	18.5	JUL 2001 25	0910	47	565	26.0
DEC					SEP				
21 26	1000 1400	10 7.6	 640	0	17	1000	5830	165	18.0
20									
	068	887000 B	IG BLUE R	NR MANHATTA	N, KS (LAT 39 14 1	4N LONG	096 34 16W)	
NOV 2000					JUN 2001				
01 DEC	1115	370	459	14.0	01 05	1100 1345	2150 7690	355 357	20.0 19.0
27	1030	512	606	.5	JUL	1343	7090	337	19.0
MAR 2001 08	1010	122	550	2.0	24	1000	1650	335	27.0
23	1010 1100	21200	338	2.0 6.5					
		0.0000000					10 16)		
	(06887500	KANSAS R	AT WAMEGO,	KS (LAT 39 11 52N	LONG 096	18 16M)		
DEC 2000					AUG 2001				
08 28	1010 1150	898 976	998 674	2.0 1.0	20	1015	1950	770	26.0
MAR 2001									
22	0940	25000	369	6.0					
	(06888350	KANSAS R	NR BELVUE,	KS (LAT 39 11 15N	LONG 096	08 50W)		
NOV 2000					JUN 2001				
03	1320	928	1170	14.0	11	1145	20700	350	20.0
FEB 2001 05	1040	1220	1110	3.0	AUG 01	1150	2720	880	32.0
MAR					SEP				
14 MAY	1140	7330	760	5.5	19	1250	9240	590	22.0
15	1310	8110	523	23.0					

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)
			1	Kansas River	BasinContinued				
		06888500	MILL C I	NR PAXICO, KS	G (LAT 39 03 44N LC	NG 096	10 52W)		
OCT 2000					MAY 2001				
12 JAN 2001	1555	4.5	700	14.0	08 JUN	1330	324	275	15.5
09 MAR	1110	9.6	920	.5	06 JUL	1110	1880	324	19.0
30	1215	131	524	10.0	26	1340	54	545	28.5
	(06889000	KANSAS R	AT TOPEKA, I	CS (LAT 39 04 00N L	ONG 095	38 58W)		
OCT 2000 10	1250	1120	939	12.0	JUN 2001 18	1210	22900	655	
NOV 30	1420	1040	1070	4.0	21 JUL	1115	32200	360	21.0
DEC 20	1100	899	1290	.5	10 31	1030 1045	3290 2230	801 810	29.5 30.0
APR 2001 24	1130	5080	652	15.5	AUG 28	1100	6090	412	27.5
					SEP 19	1130	9200	408	21.0
	0688	89160 SO	LDIER C N	R CIRCLEVILLE	E, KS (LAT 39 27 47	'N LONG	095 57 00W)	
OCT 2000					FEB 2001			,	
18 NOV	1720	.24		17.0	13 MAR	1345	4.4	715	.5
21	0905	.26	835	2.0	22	1455	9.9	626	13.0
	(06889170	SOLDIER (C NR HOLTON,	KS (LAT 39 26 03N	LONG 09	5 56 31W)		
MAR 2001	1050		604	11 5	JUN 2001	1000	500	150	15.0
23 27	1350 1710	14 9.6	624 627	11.5 9.0	04 20	1200 1050	523 700	170 197	15.0 17.0
MAY 04	1240	84	396	19.0	AUG 02	1040	7.9	479	28.5
	(06889200	SOLDIER (C NR DELIA, F	S (LAT 39 12 08N L	ONG 095	52 25W)		
JAN 2001					JUN 2001				
08 APR	1235	2.6	1040	1.0	01 20	1030 1300	26 3660	640 176	18.5
02	1100	17	435	8.0	JUL 25	1345	11	400	29.0
	(06889500	SOLDIER	C NR TOPEKA.	KS (LAT 39 06 00N	LONG 09	5 43 27W)		
NOV 2000					JUL 2001		,		
25 JAN 2001	1245	5.8	631	6.0	25 AUG	1050	16	300	27.5
24 MAR	1520	6.2	741	6.0	28	1440	43	234	29.0
23	1300	75	520	14.0					
	068	890100 D	ELAWARE R	NR MUSCOTAH	KS (LAT 39 31 17N	LONG 0	95 31 57W)		
OCT 2000					MAR 2001				
19 DEC	1410			22.0	20 MAY	1450		425	11.0
27	1305		1000	0	10	1400	47	520	27.5
	06	5891000 1	KANSAS R	AT LECOMPTON,	KS (LAT 39 03 07N	LONG 0	95 23 15W)		
OCT 2000 18	1240	1060	1060	18.5	JUN 2001 13	1045	22500	516	26.5
DEC 07	1400	987		4.5	21 AUG	1100	46400	244	21.5
JAN 2001 09	1120	1340	990	.5	13 SEP	1140	4550	492	30.0
MAR 05	1325	9010	311	4.0	21	1020	15200	236	22.0
MAY 17	0950	8880	580	27.0					
±/···	0,50	5500	300	27.0					

		-	ADIII DA.	IA, WAIEK IEA	COCTOBER 2000 TO E	DE TEMBE			
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)
			I	Kansas River 1	BasinContinued				
	06	891500 WA	KARUSA R	NR LAWRENCE,	KS (LAT 38 54 40N	I LONG 0	95 15 37W)		
NOV 2000 02	0805	117	303	15.5	APR 2001 17	1445	661	333	12.0
03 JAN 2001	1500	46	372	14.5	MAY 03	0815	265	347	19.0
08 FEB	1200	25	456	.5	JUN 14	1110	478	321	24.0
19 MAR	1550	37	427	3.5	JUL 24	0650	17	316	29.0
21	0930 1050	1050 1550	308 308	7.0 9.0	AUG 20	0935	37	300	25.0
23					, KS (LAT 39 06 59				23.0
OCT 2000	000	J2000 BIN	ANGER C I	WIC TONGANONIE	JUL 2001	IN LIGHT	000 00 00W	,	
13	1435	1.6	385	15.5	03	1305	80	492	28.5
DEC 07	0935	8.2		.5	05 09	1110 1035	57 38	508 456	28.0
28 MAR 2001	1205	7.1	709	0	12 12	1035 1305	1280 1950	267 248	24.0 23.5
23 APR	1200	226	459	11.5	13 AUG	1300	3290	126	24.0
04 MAY	1045	1930	302	8.5	09 20	1100 1305	22 14	467 492	29.0 24.0
30 JUN	1255	36	484	19.5	SEP 19	1030	5340	143	18.0
06	1050 1030	9590 20500	184 113	 20.0	23	2000	3310	113	20.0
					5 (LAT 38 59 00N I	ONG 094	57 52W)		
OCT 2000					JUN 2001		,		
12 MAR 2001	1100	1140	984	15.5	15 JUL	1125	24700	423	22.0
16 APR	1240	30000	400	4.5	26 SEP	1100	4610	580	27.5
26 MAY	1100	5600		19.0	11	1015	2140	701	22.5
23	1340	8900		19.0					
				Blue R	iver Basin				
		06893080	BLUE R 1	NR STANLEY, K	S (LAT 38 48 45N I	ONG 094	40 31W)		
OCT 2000 16	1250	7.9	354	15.0	APR 2001 18	1330	28	492	14.5
JAN 2001 09	1335	2.5	677	.5	JUN 04	1340	1200	253	16.0
FEB 20	1515	15	561	6.0	JUL 27	0945	1.5	377	24.5
MAR 01	1145	42	506	3.0	AUG 21	1355	.14	468	26.0
	068	93300 IND	IAN C AT	OVERLAND PARE	K, KS (LAT 38 56 3	0N LONG	094 40 10	W)	
NOV 2000					JUN 2001				
03 JAN 2001	0845	7.2	757	15.0	04 JUL	1005	3420	198	15.0
09 MAR	0935	13	2140	6.0	10 19	1300 1030	171 18	219 940	26.0 26.0
01 APR	1340	48	2020	6.5	AUG 10	1305	22	819	26.0
26	1245	20	948	20.5	21	1125	12	918	26.0
				_	iver Basin				
	069108	00 MARAIS	DES CYGI	NES R NR READ	ING, KS (LAT 38 34	00N LO	NG 095 57	50W)	
NOV 2000 03	1400	.02		13.0	JUN 2001 05	1245	85	287	18.0
JAN 2001 16	1300	.43		1.0	22 AUG	1005	516	258	21.0
MAR 01	1120	36	270	1.0	08	1215	.67	500	30.5
APR 12	1030	220	483	15.5					

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
				Osage Rive	r BasinContinued				
		06911490	SALT C A	T LYNDON, 1	KS (LAT 38 36 07N LC	NG 095 4	11 05W)		
NOV 2000 13 JAN 2001	1345	.01		.5	JUN 2001 05 06	1515 1200	60 1680	272 237	17.5 19.0
24 MAR	1310	.06	504	3.5	07 AUG	1050	244	248	20.5
02 APR	1135	20	321	2.5	03 SEP	1240	.46	451	31.5
11	1300	9.3	526	18.5	18	1300	503	225	19.5
	069	11900 DR	AGOON C N	IR BURLINGAI	ME, KS (LAT 38 42 30	N LONG (95 50 20W)	
FEB 2001 15	1350	86	316	.5	AUG 2001 24	1300	13	327	25.5
13					QUENEMO, KS (LAT 38				23.3
NO. 2	00912500	HUNDRED	AND IEN	MILLE C NR (30 41N I	ONG 095 3	3 34W)	
NOV 2000 13	1040	16	359	7.0	JUN 2001 27	1355	2550	287	22.5
JAN 2001 26	1135	16	406	3.0	AUG 08	1440	20	317	25.5
MAR 21	1035	1000	377	6.5	SEP 20	1135	236	263	21.0
30 MAY	1205	450	353	8.5					
16	1430	110	351	19.0					
	069130	00 MARAI	S DES CYG	ENES R NR PO	OMONA, KS (LAT 38 35	03N LON	IG 095 27	12W)	
NOV 2000 02 JAN 2001	1430	46	408	16.5	MAY 2001 04 JUN	1210	50	468	21.0
26 MAR	0825	40	415	1.5	28 AUG	1200	3230	301	24.0
14	1405	334	435	9.5	14	1235	37	411	27.5
	069135	00 MARAI	S DES CYG	NES R NR O	TTAWA, KS (LAT 38 37	7 07N LON	IG 095 16	04W)	
OCT 2000 11 JAN 2001	1520	28	393	15.0	JUN 2001 01 07	1015 1415	281 3630	358 249	19.0 20.5
03 MAR	1115	33	431	.5	26 AUG	1245	2960	281	23.0
14	1115	410	420	9.0	14	1035	32	434	26.5
MAY 11	1000	1500	394	20.0					
	0691	4000 POT	TAWATOMIE	C NR GARN	ETT, KS (LAT 38 20 0	1N LONG	095 14 55	W)	
NOV 2000					JUN 2001				
06 JAN 2001	1100	.80	440	14.0	18 JUL	1025	40	334	24.5
05 FEB	1310	.06	704	1.0	23 SEP	1300	1.5	416	30.0
19 MAY	1035	20	308	2.0	20	1425	191	188	21.0
30	1330	22	360	19.0					
	069	14950 BI	G BULL C	NR EDGERTO	N, KS (LAT 38 45 12)	LONG 09	94 58 34W)		
OCT 2000	1055	0.0	211	17 5	JUN 2001	1220	2 1	F00	25.0
23 JAN 2001	1055	82	311	17.5	29 JUL	1330	3.1	522	25.0
03 FEB	1120	1.5	1080	.5	30 AUG	1315	4.6	389	28.5
14 MAR	1015	167	303	3.0	10 21	0825 0805	.88 2.8	633 707	26.5 24.0
28 APR	1225	6.7	603	7.5					
19	1020	7.8	521						

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	CIFIC CON- DUCT- ANCE	TEMPER- ATURE WATER (DEG C) (00010)
				Osage River	BasinContinued				
	069	914990 L	BULL C N	R SPRING HIL	L, KS (LAT 38 45 11	LN LONG	094 52 10W)	
NOV 2000	1.450	0.6	4.45	16.5	JUN 2001	0015	505	100	10.0
02 JAN 2001	1450	2.6	445	16.5	20 20	0915 1045	527 272	127 147	19.0 19.0
03 FEB		.28	1330	0	20 JUL	1240	160	166	19.5
14 MAR	1330	48	454	3.0	10 16	1015 1010	20 .75	1170 531	25.0 22.0
05 28	1040 0930	7.0 4.2	563 560	4.5 7.0	AUG 10	1045	.68	888	24.0
APR 19	1540	4.8	565	16.5					
	069	915000 в	IG BULL C	NR HILLSDAL	E, KS (LAT 38 38 12	N LONG	094 53 29W)	
OCT 2000					APR 2001				
10 JAN 2001	1255	11	288	13.5	23 JUN	1400	30	323	17.0
08 FEB	0905	6.0	308	1.5	29 JUL	0820	520	298	22.5
21 MAR	0855	119	241	2.0	18	1355	23	271	29.0
05	0810	319	285						
	0691580	O MARAIS	DES CYG	NES R AT LA	CYGNE, KS (LAT 38 2	20 43N L	ONG 094 46	19W)	
OCT 2000 31	1100	56	407	20.5	JUN 2001 05	1415	11600	210	19.0
JAN 2001 04	1055	44	479	.5	07 13	1245 1055	13100 2090	221 350	21.5 25.0
MAR 29	0900	1670	370	9.0	AUG 01	1330	202	313	32.0
APR 24	1210	325	399	19.0	14	1015	57	302	28.0
MAY 23	0930	3270	285	19.5					
	06916600	MARAIS DE	ES CYGNES	R NR KS-MO	ST LINE, KS (LAT 38	3 13 21N	LONG 094	40 04W)	
OCT 2000	1415	67	408	21.5	JAN 2001	1500	46	467	.5
31	1415	67			04 KS (LAT 38 01 09N	1500		407	.5
NOV 2000	(76917000	L USAGE !	K AI FULION,	JUN 2001	LONG 09	4 42 40W)		
06 JAN 2001	1625	.51	293	14.5	06 08	0840 1230	2300 290	280 350	21.0 23.0
10 FEB	0935	1.3	483	2.5	JUL 26		4.9		27.5
22 APR	1445	58	433		SEP 18	1130 0945	6.7	352	21.5
25	1030	109	437	17.0	10	0943	0.7	332	21.5
	069	917240 M	ARMATON R	AT UNIONTOW	N, KS (LAT 37 50 08	N LONG	094 58 52W)	
APR 2001 06	1220	35	360	17.5	JUL 2001 20	0725	.30	368	27.5
MAY	1655	12	443	19.5	20	0845	.53	343	27.5
23 31 JUN	1115	175	275		27 SEP 11	1230 0845	2620 14	155 241	25.0 21.5
04	1200	453	268	17.0	11	0045	14	241	21.5
	069	917380 M	ARMATON R	NR MARMATON	, KS (LAT 37 49 031	I LONG 0	94 47 30W)		
NOV 2000 07	0015	5.3	281	12.0	JUN 2001 08	1000	191	319	23.0
JAN 2001	0915		281		08 JUL 26	1000			
05 31	0930 1655	1.9 372	248	.5 2.0	SEP	1500	1.5	513	29.0
FEB 22	0945	80	388	2.0	18	1605	2.9	341	23.0
APR 25	1630	53	416						

		WATER-QU	ALITY DAT	A, WATER YEA	R OCTOBER 2000 TO	SEPTEMBER	2001		
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)
				Arkansas	River Basin				
	07137	7000 FRON	TIER DITC	H NR COOLIDG	E, KS (LAT 38 02 1	18N LONG	102 02 19	W)	
AUG 2001									
01	1240	34	2920	26.0					
	071	.37500 AR	KANSAS R	NR COOLIDGE,	KS (LAT 38 01 341	N LONG 10	2 00 41W)		
OCT 2000					JUN 2001				
05 NOV	1140	393	2830	13.5	05 25	1645 1135	294 460	3580 3070	21.0 26.5
16	1325	215	4130		JUL				
JAN 2001 04	1240	175	4080	4.0	19 31	1245 1400	611 531	2850 2830	27.0
FEB 21	1055	188	4160	3.0	AUG 29	1035	159	3800	25.0
APR 27	1100	173	3960	15.0	SEP 11	1150	102	4390	20.5
27									20.5
	0.71	.38000 AR	KANSAS R	AT SYRACUSE,	KS (LAT 37 57 581	N LONG 10	1 45 23W)		
NOV 2000 09	1000	215	3620	3.0	JUN 2001 20	1135	167	3380	19.5
JAN 2001 04	1525	183	4110	5.0	JUL 06	0835	477	2750	
FEB					AUG				
21 MAR	1445	194	4040	3.5	01 SEP	0855	476	2860	24.5
29 MAY	1240	195	3690	12.0	11	1610	100	4180	24.5
07	1530	163	3670	19.5					
	07	7138020 A	RKANSAS R	AT KENDALL,	KS (LAT 37 55 481	N LONG 10	1 32 56W)		
NOV 2000					JUN 2001				
17 JAN 2001	1155	212	3500		06 28	0930 0830	301 420	3660 2810	19.0 24.0
04 FEB	0900	187	3960	2.0	AUG 01	1535	490	2910	29.0
22	1440	200	3990	6.0	SEP				
MAR 29	1540	192	3350	12.0	12	0915	105	4000	18.0
	071	.38070 ARI	KANSAS R	AT DEERFIELD	, KS (LAT 37 58 1	ln long 1	.01 07 42W)	
NOV 2000					MAY 2001			•	
24	1430	185	3730		16	1020	81	4020	24.0
JAN 2001 03	1615	188	3880	0	JUN 29	0950	97	3010	23.5
FEB 23	0800	84	4020	4.5	AUG 02	1340	133	2960	29.5
MAR 23	1450	152	4000		SEP 13	0855	69	3890	19.0
23				m CADDEN CIM					10.0
	0/13	39000 ARK	ANSAS R A	T GARDEN CIT	Y, KS (LAT 37 57 :	ZIN LONG	100 52 37	W)	
OCT 2000 25	1410	66	4250	19.0	MAY 2001 01	1440	6.9	4240	22.0
NOV 15	1425	150	3890	10.0	25 JUN	1055	178	3260	18.0
JAN 2001					22	1015	90	3750	23.0
03 FEB	1350	169	3850	0	29 AUG	1445	1.2		34.5
05 26	1445 1540	166 66	4000 3900	9.5 5.0	03 16	0950 1535	3.1 34	3180 2800	25.5 33.0
MAR 23	1130	140	3900		20		J.		
۵3					/		00 05 ==	,	
	0713	9500 ARK	ansas R A	T DODGE CITY	, KS (LAT 37 44 4	in long 1	.UU U1 57W)	
FEB 2001 23	1115	36	3920	3.5	JUN 2001 07	1555	152	3540	26.0
APR					25	1240	26	3510	32.0
09	1040	41	4010						

		WIIIII ,	201HIII DI	iii, Wiidit idiit	OCTOBBIC 2000 TO	ODI IDIIDDI	2001		
DATE	TIME	DIS- CHARGE INST. CUBIC FEET PER SECONI (00061	, SPE- CIFIC CON- DUCT- ANCE D (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
			P	rkansas River B	sasinContinued				
	07	7140000	ARKANSAS	R NR KINSLEY, K	S (LAT 37 55 33	N LONG 0	99 22 31W)		
NOV 2000					JUN 2001				
21 JAN 2001	1235	4.5	1900	8.0	21 AUG	1100	104	3510	24.0
12 MAR	1030	4.5	1740	6.5	09 SEP	1105	3.3	1890	23.5
06 28	1100 1110	16 29	1980 2810	8.0 8.0	24	1105	2.5	1680	19.0
MAY 22	1105	16	2030	20.0					
	(07140850	PAWNEE R	NR BURDETT, KS	(LAT 38 12 24N	LONG 099	9 38 35W)		
JUN 2001					SEP 2001				
07	1100	16	423	19.0	18	1115	1710	113	17.0
	07	7141175	BUCKNER C	NR BURDETT, KS	(LAT 38 09 45N	LONG 099	9 38 33W)		
JAN 2001 11	1420	2.5	1110	1.0	MAY 2001 23	1220	1.2	1070	17.0
FEB 20	1120	5.4	1040	0	29	1130	507	188	14.0
APR 02	1100	3.7	1020	12.5					
02111	1100				(LAT 38 12 00N	TONG 099	20 50W)		
JAN 2001		07141200	J FAMILE	K AI KOZEL, KO	MAY 2001	LONG 055	20 30W)		
19 FEB	1425	1.6	1250	0	23 30	1430 1125	.10 395	 184	17.5 15.0
20 APR	1450	2.9	940	0	JUN 07	1355	130	207	20.0
02	1330	.71	1010	12.0	SEP 19	1120	2340	150	17.5
					24	1515	62	1760	19.0
	07	7141220	ARKANSAS	R NR LARNED, KS	(LAT 38 12 13N	LONG 099	9 00 07W)		
OCT 2000 26	1105	13	1410	17.0	JUN 2001 27	1130	80	2560	26.0
JAN 2001 09	1020	6.2	1720	0	AUG 09	1505	8.1	1550	32.0
FEB				4.5	SEP				26.0
20 APR	1100	14	1500	13.0	17 20	1415 1120	.64 2190	1690 1750	21.0
02 MAY	1240	35	2480						
16	1030	47	1540	24.0					
	0714	11300 A	RKANSAS R	AT GREAT BEND,	KS (LAT 38 21 1	.IN LONG (098 45 50W)	
OCT 2000 20	1440	8.2	1140	23.0	MAY 2001 07	1340	1540	339	18.5
NOV 22	1100	11	1340	7.0	16 JUN	1410	98	1190	29.0
JAN 2001 09	1330	11	1180	8.5	25 AUG	1235	111	2290	27.0
FEB 22	1225	18	1360	11.5	07 SEP	1100	16	1110	26.0
APR 03	1215	46	1970	14.5	21	1055	2010	1800	18.5
		7141770		NR ALEXANDER, K	S (LAT 38 27 53	N LONG 09	99 37 20W)		
OCT 2000					JUN 2001				
25 JAN 2001	1000	12	1380	16.0	06 08	1040 1255	351 1820	359 144	16.0 19.5
12 FEB	1350	9.3	1150	4.0	14 26	1110 1030	31 4.3	697 1190	21.0
21	1350	12	1250	1.0	AUG				
APR 02	1425	9.0	1030	12.0	09 SEP	1040	.73	1060	25.0
MAY 14	1415	7.6	1350	23.0	26	1050	16	769	15.5

		WAILIN QU	MUIII DA	IA, WAIDK IDA	R OCTOBER 2000 TO	JEE LENDE	K 2001		
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
			A	rkansas River	BasinContinued				
	(7141780	WALNUT C	AT NEKOMA, K	S (LAT 38 28 07N 1	LONG 099	22 07W)		
OCT 2000 25 DEC	1345	15	1240	17.0	JUN 2001 05 07	1305 1010	1000 423	166 306	15.0 18.0
04 JAN 2001	1340	10	1230	1.0	08 09	1430 0945	2670 2640	110 192	19.0 22.0
17	1410	10	1150	.5	09	1435	2320	195	22.0
FEB 22	1410	16	1200	1.0	19 AUG	1015	53	751	21.0
APR 03	1355	12	1000	13.0	09 SEP	1310	2.8		25.0
MAY 17	1010	15	1110	21.0	26	1355	23	787	14.5
					G /TAM 20 07 40M	roma ooo	00 504)		
	·	7/141900	WALINUI C	AI ALBERI, K	S (LAT 38 27 40N 1	LONG 099	00 50W)		
NOV 2000 08	1025	11	1250	5.0	APR 2001 04	1450	18	1000	11.5
JAN 2001 18	1005	16	1160	0	MAY 14	1020	164	670	21.0
FEB 26	1415	31	1090	1.0					
					CDEAR DEND KG /I	»m 20 0F	OOM TOMO	000 45 53	T.T \
	£ZUZU WAI	TNOI C BTW	CHEYENN	E BIMS DV NR	GREAT BEND, KS (L	AI 38 25	USIN LOING	098 45 53	(W)
NOV 2000 03	1030	4.9	1220	12.0	MAY 2001 23	1045	53	1000	15.5
JAN 2001 18	1320	2.2	1240	0	JUN 29	1245	74	1250	23.5
FEB 22	1110	1.9	1260	0	AUG 08	1130	3.0	1360	26.0
MAR 01	1210	57	680	0	SEP 18	1110	1120	145	18.0
APR 13 23	1040 1140	244 665	612 262	12.0 15.0					
	07142	2300 RATT	TESNAKE (C NR MACKSVII	LE, KS (LAT 37 52	18N T.ON	G 098 52 3	(3W)	
ogm 0000	07112	1500 14111	LLDOWING V	C IVIC PRICIOSVIII		TOIV LOIN	0 000 02 0	,S II)	
OCT 2000 10 NOV	1450	7.0	558	13.5	APR 2001 27 JUN	0800	19	473	14.5
15	1500	15	596	10.0	21	1600	17	618	26.0
JAN 2001 09	1045	14	614	3.5	JUL 27	0900	2.7	440	24.5
MAR 09	1210	22	450	10.5	SEP 18	1310	11	346	21.5
	071	.42575 RA	TTLESNAKI	E C NR ZENITH	, KS (LAT 38 05 3	7N LONG	098 32 45W	1)	
OCT 2000					JUN 2001				
11	1140	6.3	8860	16.5	11	1140	269		26.0
30 NOV	1215	46	2760	16.5	29 JUL	1035	25		23.5
27 JAN 2001	1240	30		5.0	23 SEP	1150	10		30.0
10 APR	1055	33	3080	3.5	06	1140	6.2	8330	25.5
24	1125	42	3280	17.0					
	071	42680 AR	KANSAS R	NR NICKERSON	, KS (LAT 38 08 4	2N LONG	098 06 39W	1)	
OCT 2000 10	1330	81		12.5	JUN 2001 11	1320	3530	145	26.0
NOV 27	1140	104	3090	6.0	12	1615	3670	580	26.0
JAN 2001					JUL 03	1020	330	2110	25.5
03 MAR	1240	96	3080	3.0	AUG 15	1000	112	2080	
19 MAY	1240	329	2580	9.5					
08	1030	1800	641	18.5					

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
			Aı	rkansas River	BasinContinued				
		07143300	COW C 1	NR LYONS, KS	(LAT 38 18 30N LOI	NG 098 1	1 30W)		
OCT 2000 10	1030	3.5	2000	6.0	MAY 2001 07 21	1125 1235	614 51	583 1410	18.0
21 JAN 2001	1040	6.8	1930	.5	JUN 21	0915	2200	153	19.5
02	1235	7.4	2060	0	JUL				
MAR 23	1110	33	1780	12.5	17	1120	19	1600	
	0714	13330 ARK	ANSAS R 1	NR HUTCHINSON	I, KS (LAT 37 56 4	7N LONG (097 46 29W)	
OCT 2000					MAY 2001				
12 NOV	1315	114	2180	18.0	09 JUN	1000	2180	744	21.0
28	1105	187	2710	8.0	13	1230	5000	700	27.5
JAN 2001 04	1025	172	2750	-0.5	JUL 24	1015	257	1890	27.5
MAR 08	1045	584	2570	7.0	SEP 06	1040	126	2050	23.0
00					KS (LAT 37 46 53N			2030	23.0
		77113373	111111111111111111111111111111111111111	ic ivic railad,	·	HOING 05	, 25 5511,		
OCT 2000 11	1045	108	1900	12.5	MAY 2001 04	1015	421	2370	19.5
27 NOV	0930	1810	389	17.0	JUN 14	1020	5450	700	24.0
27	1040	211	2440	7.5	JUL				
JAN 2001 08	1305	220	2630	2.0	24 AUG	0945	233	1930	28.0
MAR 13	1020	685	1780	12.0	29	1320	180	1360	30.0
	07143	8665 L AR	KANSAS R	AT ALTA MILI	LS, KS (LAT 38 06 4	44N LONG	097 35 30	W)	
OCT 2000					JUN 2001				
12	1020	3.3	1360	12.5	27	1150	141	550	24.0
NOV 16	1055	14	1210	3.5	JUL 25	1105	9.7	1350	28.5
JAN 2001 05	1005	13	2420	.5	AUG 06	1045	8.4	1110	27.5
MAR 06	1035	189	1040	4.0	30	1035	5.6	2040	24.0
MAY 10	1020	36	1930	20.0					
10					LSTEAD, KS (LAT 38	01 43N 1	ONG 097 3	2 25W)	
T337 0001	0,1130,1			30 141 1414		01 101,	20110 057 3	2 23117	
JAN 2001 11	1105	25	1740	3.0	SEP 2001 05	1005	6.9		25.5
	0714	14100 L A	RKANSAS I	R NR SEDGWICK	K, KS (LAT 37 52 59	9N LONG (097 25 27W)	
JAN 2001					SEP 2001				
11	1305	56	1140	3.0	04	0955	19		25.5
AUG 10	1000	16		27.0					
	071442	200 L ARK	ANSAS R	AT VALLEY CEN	TTER, KS (LAT 37 49	9 56N LOI	NG 097 23	16W)	
OCT 2000					MAY 2001				
11 NOV	1325	23	885	13.0	02 JUN	1030	89	900	20.0
15	1020	62	700	5.0	27	1505	296	496	27.0
JAN 2001 04	1310	48	1220	2.0	JUL 18	1045	70	773	27.5
MAR 07	1050	373	770	5.5	AUG 28	1000	33	801	23.0
- · · · ·		2.3			20		55		

				,					
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECONI (00061)	CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
			Aı	rkansas River B	BasinContinued				
	07	7144300	ARKANSAS F	R AT WICHITA, E	KS (LAT 37 38 41)	N LONG 09	97 20 06W)		
OCT 2000					JUL 2001				
11 NOV	1420	52	1490	19.5	02 AUG	1320	1030	1700	28.5
17 JAN 2001	0915	307	1590	4.0	28 29	1315 0920	168 330	1690 1890	31.0 27.5
05 MAR	1030	260	1960	1.0	SEP 20	1045	5610	282	20.0
12 MAY	1210	907	1340	9.0					
01	1025	595	1960	20.0					
	07144480	COWSKI	N C AT 119	OTH ST AT WICH	ITA, KS (LAT 37	42 05N L	ONG 097 28	49W)	
APR 2001	1500		020	20. 0	JUL 2001	1145	0.0	1700	20 5
09 24	1520 1305	7.3 5.4	938 632	20.0 17.0	11 12	1145 0910	.80 1.0	1780 1020	28.5 27.0
MAY 25	1430	1.9	803	17.5	25 AUG	1220	2.4	1660	28.5
JUN 02	1150	58	815	19.0	03 SEP	0950	1.1	2100	
02 06	1705 0845	93 160	491 289	19.5 21.0	17	1555	2.9	1010	23.5
					5 (LAT 37 32 34N	TONG 09	7 16 31W)		
OCT 2000		37144330	AIGGIGADAD	K AI DERDI, K		LONG 05	/ 10 31W/		
10	0930	212	1640	9.0	JUN 2001 09	1340	14900	230	22.0
NOV 15	1100	417	1570	8.0	JUL	1020	5020	680	23.5
JAN 2001 08	1345	389	4430	6.0	30 SEP	1035	404	1550	30.0
MAR 14	0930	2770	616	9.0	21	1055	4720	224	22.0
APR 30	1020	722	1060	19.0					
					E, KS (LAT 37 50	41N LONG	3 097 56 0	9W)	
JAN 2001	0/11	1700 141	141141411001111	it in the initial in	AUG 2001	IIIV DOIN	3 057 50 0	JW)	
12	1020	117	1240	5.0	09	1010	16	1110	
	071	144910 8	SF NINNESCA	AH R NR PRATT,	KS (LAT 37 38 1	6N LONG (098 43 14W)	
OCT 2000					JUN 2001				
10 25	1710 1215	6.8 189	551 109	13.0 15.5	22 JUL	0850	12	497	20.5
NOV 15	1140	12	328	4.5	29 AUG	1520	6.8	540	27.0
JAN 2001 09	1310	11	603	6.5	03 SEP	1040	5.4	492	26.0
MAR 09	0830	13	360	7.5	18	1545	25	292	21.5
APR 26	1615	12	551	19.5					
20					IZG /I NM 27 22	F1N TONG	007 51 10	T-7.)	
	0 / 1 4	15200 SE	' NINNESCAF	I R NR MURDOCK	, KS (LAT 37 33 !	5IN LONG	09/51 10	W)	
OCT 2000 13	1025	88	1280	15.5	APR 2001 26	1015	240	911	18.5
NOV 14	1240	230	1110	7.0	JUN 25	1030	219	1010	26.5
JAN 2001 04	1105	179	1060	0	AUG 02	1025	76	1310	29.0
MAR 13	1430	379	717	14.5					
13					5 (LAT 37 27 26N	TONIC OO	7 25 20W)		
	(7/145500	NINNESCA	I K NK PECK, K		LONG 09	/ 25 20W)		
OCT 2000 10	1215	97	1290	12.0	APR 2001 30	1305	312	690	19.5
26 NOV	1215	13900	220	18.5	JUN 07	1015	3470	445	24.0
14 JAN 2001	1340	354	928	6.0	JUL 23	0955	74	1260	27.5
02 MAR	1420	221	1030	0					
14	1320	1080	693	14.5					

DATE	TIME	DIS- CHARGE INST. CUBIC FEET PER SECONI (00061)	CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
			Aı	rkansas River	BasinContinued				
	07	7145700	SLATE C A	r wellington,	KS (LAT 37 15 00	N LONG 0	97 24 12W)		
OCT 2000 13	1325	2.5	1410	15.5	JUN 2001 26	1415	6.3	851	26.0
NOV 14	1025	13	818	3.0	JUL 09	1410	3.4	1130	30.0
JAN 2001 08	1040	16	1290	0	AUG 09	1040	.53	1260	28.0
MAR 20	1330	50	718	9.5	SEP 17	1050	1.1	1180	22.5
MAY 01	1400	12	1170	22.0	17	1030	1.1	1100	22.5
01					w vc /ram 27 02	2201 1 001	c 007 02 2	OW.)	
OGT 2000	07146	500 ARI	MANSAS R A.	I ARKANSAS CII	Y, KS (LAT 37 03	Z3N LON	G 097 03 3	2W)	
OCT 2000 11	1400	346	1690	16.0	MAY 2001 03	1130	1490	1590	21.0
NOV 16	1410	1170	1360	6.5	JUN 19	1455	4080	1190	27.5
JAN 2001 16	1140	877	3670	1.0	AUG 01	1040	658	1500	29.0
MAR 07	1205	3630	773	7.0	SEP 21	1350	5060	242	23.5
	071	147070 V	WHITEWATER	R AT TOWANDA,	KS (LAT 37 47 4	5N LONG	097 00 45W)	
OCT 2000	1025	7.5	1540	10.0	MAY 2001 02	1335	50	1570	21.0
NOV					JUL				
14 DEC	1100	34	971	4.5	19 AUG	1125	31	1300	28.5
28 MAR 2001	1240	23	2410	0	27	1015	13	1530	
05 16	1100 0940	195 6290	1020 250	5.5 7.0					
	07	7147800	WALNUT R	AT WINFIELD, K	S (LAT 37 13 27N	LONG 09	6 59 40W)		
OCT 2000					MAY 2001				
12 NOV	1130	55	900	15.5	01 JUN	1100	328	702	22.0
16 JAN 2001	1105	289	471	5.0	19 JUL	1325	944	640	27.0
09 MAR	1245	182	510	.5	17	1055	153	878	29.0
08	1345	1000	357	6.0					
	0714	49000 ME	EDICINE LOI	DGE R NR KIOWA	, KS (LAT 37 02	17N LONG	098 28 04	W)	
OCT 2000 10	1055	45	1070	10.5	APR 2001 26	1335	166	934	22.5
NOV 14	1615	159	1190	7.5	JUN 28	1125	123	1270	27.5
JAN 2001 10	1050	146	280	2.5	JUL 26		30	1260	29.0
MAR 13	1025	291	1180	10.0	SEP 19	1005	309	625	20.5
13					KS (LAT 37 07 44				20.5
OCT 2000	0.	,151500	CIIIIGIGICIII	it int combin,	JUN 2001	TOING U	37 30 01 11 7		
13	1100	51	520	15.5	06	1315	5650	166	22.0
NOV	0950	7240	138	17.0	JUL 09	1100	94	707	31.0
13 JAN 2001	1300	268	632	6.0	SEP 17	1340	37	284	28.5
03 MAR	1150	141	137	0					
20	1020	616	395	8.0	,				
	07	/155590	CIMARRON I	R NR ELKHART,	KS (LAT 37 07 30)	N LONG 1	U1 53 50W)		
MAY 2001 24	0935	63	860	18.0					

		WATER-QU	IATT.I.A DA.	IA, WATER YEA	R OCTOBER 2000 TO S	ELLEMBE	SR 2001		
DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)		TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
			A	rkansas River	BasinContinued				
	073	157500 CR	OOKED C I	NR ENGLEWOOD,	KS (LAT 37 01 54N	LONG 1	LOO 12 29W)		
DEC 2000					JUN 2001				
04 JAN 2001	1320	7.1	3700	10.0	07 JUL	1210	7.6	4440	28.0
24 APR	1130	8.1	3600	6.0	30 SEP	1325	.76	4220	35.5
12	1345	10	4200	18.0	26	1330	1.4	4600	
	073	166500 VE	RDIGRIS I	R NR ALTOONA,	KS (LAT 37 29 26N	LONG C)95 40 49W)		
OCT 2000					MAY 2001				
12 NOV	1520	4.3		16.5	22 JUL	1325	19	440	22.0
30 JAN 2001	1010	56		5.0	23 AUG	1145	7.8	370	30.0
11 APR	0905	13	450	1.0	28	1530	11	325	28.5
10	1100	684	400	19.5					
		07167500	OTTER C	AT CLIMAX, K	S (LAT 37 42 30N I	ONG 096	5 13 30W)		
OCT 2000 13	0900	. 29		13.0	JUN 2001 01	1005	27	354	18.0
NOV 28	1005	6.8		4.5	20 JUL	1210	6820	163	20.5
JAN 2001 11	1455	6.5	616	1.5	18 AUG	1210	16	512	28.0
APR 03	1055	36	515	10.0	28 SEP	1035	2.0	471	24.5
03	1033	30	313	10.0	18	1100	9350	184	20.0
	(07169500	FALL R A	r fredonia, k	S (LAT 37 30 30N I	ONG 095	5 50 00W)		
OCT 2000 12	1750	10		14.5	MAY 2001 22	1045	18	480	20.0
NOV		60		7.0	JUL				
28 JAN 2001	1315				18 AUG	1640	31	384	30.0
11 APR	1210	20	524	1.0	28	1325	44	378	26.5
10	1450	1200	314						
	(07169800	ELK R AT	ELK FALLS, K	S (LAT 37 22 32N I	ONG 096	5 11 07W)		
OCT 2000 12	0835	.13	527	12.5	MAY 2001 04	0925	43	458	21.0
NOV 17	0930	37	352	4.0	JUN 18	1735	75	305	26.0
JAN 2001 17	0925	17	272	1.0	JUL 31	1425	6.0	442	31.5
18 MAR	1350	16	294	1.0	SEP 19	1700	215	225	21.5
08	0915	114	282	5.5					
	0,	7170060 E	LK R BL 1	ELK CITY LK,	KS (LAT 37 16 46N	LONG 09	95 46 53W)		
OCT 2000 12	1215	12		16.5	APR 2001 11	1040	6.2	338	19.0
24 NOV	1030	12	327	17.5	MAY 22	1600	5.5	346	22.5
03	1000 0930	6.5 6.0	322	18.0 7.0	JUL 19	0905	6.9	345	27.5
JAN 2001					AUG				
10 MAR	1040	2.4	348	5.5	21	1620	6.2		28.0
12	1610	1280	279	8.5					
	07170	U500 VERD	OIGRIS R	AT INDEPENDEN	CE, KS (LAT 37 13	26N LON	NG 095 40 4	3W)	
OCT 2000 11	1720	29		13.0	MAY 2001 22	1800	144	394	22.0
NOV 29	1230	127		7.0	JUL 19	1230	112	359	30.0
JAN 2001 10	1315	37	519	2.0	AUG 29	0935	103	386	27.0
APR 04	1030	1530	402	14.0					
				====					

		DIS- CHARGE, INST. CUBIC FEET	SPE- CIFIC CON- DUCT-	TEMPER- ATURE	30105551 2000 10		DIS- CHARGE, INST. CUBIC FEET	SPE- CIFIC CON- DUCT-	TEMPER- ATURE
DATE	TIME	PER SECOND (00061)	ANCE (US/CM) (00095)	WATER (DEG C) (00010)	DATE	TIME	PER SECOND (00061)	ANCE (US/CM) (00095)	WATER (DEG C) (00010)
		(00001)			er BasinContinued		(00001)	(00033)	(00010)
		07172000			S (LAT 37 00 13N L	ONG 096 1	.8 54W)		
OCT 2000					MAY 2001				
11 NOV	1755	1.6	467	17.0	03 JUN	1505	110	504	24.0
16 JAN 2001	1610	98	433	5.0	18 JUL	1745	40	486	28.0
16 MAR	1340	58	263	.5	31	1720	.51	416	31.5
07	1610	308	294	7.0					
	0717	9500 NEO	SHO R AT	COUNCIL GRO	VE, KS (LAT 38 39	54N LONG	096 29 38	W)	
NOV 2000 09 JAN 2001	1520	8.5	360	7.0	MAY 2001 02 JUL	1155	5.3	365	20.0
23 MAR	1220	6.2	391	3.5	06 AUG	1200	6.8	354	28.5
08	1215	5.2	436	7.5	30	1230	9.5	335	27.5
	07	179730 N	EOSHO R N	R AMERICUS,	KS (LAT 38 28 01N	LONG 096	15 01W)		
NOV 2000 09 DEC	1230	28	376	8.0	MAY 2001 02 08	1445 1430	49 733	369 431	20.0
29 MAR 2001	0905	13	523	.5	JUL 02	1130	60		26.0
08	0820	100	489	3.5	AUG 10	1430	11	315	29.0
					20	1345	.07	389	30.0
	07179	795 N CO	TTONWOOD	R BL MARION	I LK, KS (LAT 38 22	00N LONG	9 097 05 0	OW)	
NOV 2000 07 DEC	1540	10	619	11.5	MAY 2001 01 JUL	1155	6.5	659	17.5
27 MAR 2001	1115	3.6	639	1.0	05 AUG	1205	9.1	615	24.5
07	0845	3.2	637	2.5	29	1200	10	626	26.0
	0718	0400 COT	TONWOOD R	NR FLORENC	E, KS (LAT 38 14 1	ON LONG C	196 52 37W)	
NOV 2000 08 DEC	1040	82	810	7.0	MAY 2001 01 JUN	1455	93	1110	20.0
27 MAR 2001	1550	42	1350	.5	21 AUG	1415	3370	261	21.5
07	1240	186	977	5.5	29	1510	52	791	27.0
	071	.80500 CE	DAR C NR	CEDAR POINT	C, KS (LAT 38 11 55)	N LONG 09	6 49 22W)		
NOV 2000 07 DEC	1145	132	182	7.5	JUN 2001 21 JUL	1140	1300	143	20.5
28 MAR 2001	1100	11	610	1.0	05 AUG	1630	24	488	26.5
06 MAY	1340	63	508	5.0	30	0910	5.4	463	25.0
02	0910	24	531	19.0					
	0718	2250 COT	TONWOOD R	NR PLYMOUT	TH, KS (LAT 38 23 5	1N LONG C	96 21 21W)	
NOV 2000 09	0830	363	316	6.5	MAY 2001 02	1720	270	706	21.0
DEC					JUL				28.0
28 MAR 2001 07	1450 1540	82 782	978 625	.5 5.5	06 AUG 10	0835 1135	236 79	645 489	28.0
07	T240	102	025	٥.٥	10	1133	13	707	20.3

			~		•					
DATI	<u> </u>	TIME	INST. CUBIC FEET PER SECOND	CON-		DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C) (00010)
				A:	rkansas River	BasinContinue	ed			
		07	'182510 N	EOSHO R A	r burlington,	KS (LAT 38 11	40N LONG 0	95 44 10W)		
13	2000 3 4	1300 1435	24 7.2	 524	17.0 19.5	JUN 2001 01 28 AUG		284 5670	 300	21.0 27.0
	2001	1450	19		5.0	10 SEP	1205	42	414	29.0
12	2	1020	25	613	3.0	~	0840	589	392	21.0
APR 24	1	1000	493	508	17.0					
			07183000	NEOSHO I	R NR IOLA, KS	(LAT 37 53 27)	N LONG 095	25 50W)		
	2000					APR 2001				
NOV		1350	20		15.0	13 MAY		1060	265	18.5
DEC	2	0935	24		3.0	31	1135	408	497	19.5
	2001	1525	25		4.0	23 AUG	1515	48	389	34.0
	9	1100	34	615	1.0	30	1400	628	420	28.0
			07183500	NEOSHO R	NR PARSONS,	KS (LAT 37 20	24N LONG 09	5 06 35W)		
	2000 L	1430	30	482	5.0	JAN 2001 18	1045	83	502	2.0
		0	7184000	LIGHTNING	C NR MCCUNE,	KS (LAT 37 16	54N LONG 0	95 01 56W)		
02	2000 2 L	1530 1025	13 4.7	265 545	17.0 2.5	MAY 2001 23 JUL	1425	13		19.0
	2001 3	1420	20	531	.5	20 AUG	0950	2.0	622	28.0
APR 13	L	1810	14	637	20.5	29	1445	.16	305	30.0

HARVEY COUNTY

WELL 24S 02W 16BAA 01 SITE NUMBER 375810097324301

24-2W-16BAA. (886) F. H. HAIBER. DRILLED, UNUSED, WATER-TABLE WELL IN SAND AND GRAVEL OF PLEISTOCENE AGE. DEPTH 57 FEET, DIAMETER 1.25 INCHES. MEASURING POINT, TOP OF PIPE, 0.8 FOOT ABOVE LSD. MEASURED BY CITY OF WICHITA.

ALTITUDE OF LAND SURFACE 1402.23 FEET

RECORDS AVAILABLE 1939 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.34 FEET BELOW LAND SURFACE DATUM AUG 21, 1939.

LOWEST WATER LEVEL 42.19 FEET BELOW LAND SURFACE DATUM OCT 01, 1992.

	WATE	R LEVELS IN	FEET BELOW	LAND SURFACE	DATUM,		
	WATER		WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 09, 2000	24.20 JA	N 22, 2001	22.78	APR 11, 2001	21.64	JUL 10, 2001	24.19
WATER YEAR 2001	1 HIGHEST	21.64 AF	PR 11. 2001	LOWEST	24.20 OCT	09. 2000	

WELL 24S 02W 28DDD 01 SITE NUMBER 375540097320901

24-2W-28DDD. (M-49) CITY OF WICHITA. DRILLED, WATER-TABLE PUBLIC-SUPPLY WELL IN SAND AND GRAVEL OF PLEISTOCENE AGE. DEPTH 246 FEET, DIAMETER 18 INCHES. MEASURING POINT, TOP OF CASING, 1.5 FEET ABOVE LSD. MEASURED BY CITY OF WICHITA.

ALTITUDE OF LAND SURFACE 1403. FEET

RECORDS AVAILABLE 1958 TO CURRENT YEAR.

HIGHEST WATER LEVEL 22.48 FEET BELOW LAND SURFACE DATUM JUN 02, 1975.

LOWEST WATER LEVEL 87.01 FEET BELOW LAND SURFACE DATUM OCT. 01, 1994.

WATER DATE LEVEL	WATER LEVELS IN DATE	FEET BELOW LAN WATER LEVEL	ID SURFACE DATUM, WATER DATE LEVEL	DATE	WATER LEVEL
OCT 02, 2000 68.45 NOV 01 66.90	FEB 01, 2001 APR 02	27.38 JUL 28.64	02, 2001 31.64		
WATER YEAR 2001 HI	GHEST 27.38 FE	EB 01, 2001	LOWEST 31.64 J	UL 02, 2001	

SEDGWICK COUNTY

WELL 26S 01W 19ABA 01 SITE NUMBER 374659097280201

26-1W-19ABA. (805) CITY OF WICHITA. DRIVEN, WATER-TABLE OBSERVATION WELL IN SAND AND GRAVEL OF PLEISTOCENE AGE. DEPTH 38 FEET, DIAMETER 1.25 INCHES. MEASURING POINT, TOP OF PIPE, 3.3 FEET ABOVE LSD.

ALTITUDE OF LAND SURFACE 1351.7 FEET

RECORDS AVAILABLE 1938 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.57 FEET BELOW LAND SURFACE DATUM APR 01, 1980.

LOWEST WATER LEVEL 9.89 FEET BELOW LAND SURFACE DATUM SEP 30, 1968.

	WATER	LEVELS IN F	EET BELOW	LAND SURFACE	DATUM,		
	WATER		WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 18, 2000	6.78 JAN	31, 2001	5.90	APR 13, 2001	4.97	JUL 12, 2001	6.15
WATER YEAR 2001	HIGHEST	4.97 APR	13, 2001	LOWEST	6.78 OCT	18, 2000	

STAFFORD COUNTY

WELL 21S 13W 27DDD 02 SITE NUMBER 381120098434802

21-13W-27DDD. DRILLED, UNUSED, WATER-TABLE WELL IN OGALLALA FORMATION. DIAMETER 2 INCHES, DEPTH 44 FEET. MEASURING POINT, TOP OF PVC CASING, 4.70 FT ABOVE LSD. MEASURED BY USGS.

ALTITUDE OF LAND SURFACE 1877. FEET

RECORDS AVAILABLE APR 27, 2000 TO CURRENT YEAR.

HIGHEST WATER LEVEL 4.32 FEET BELOW LAND SURFACE DATUM MAY 10, 2000.

LOWEST WATER LEVEL 9.07 FEET BELOW LAND SURFACE DATUM SEPT 30, 2000.

	MARIED	WATER LE	VELS IN 1	FEET BELOW	LANI	SURFACE				MARIED
D3.000	WATER			WATER		D3.000	WATER		DAME	WATER
DATE	LEVEL	DA	TE	LEVEL		DATE	LEVEL		DATE	LEVEL
OCT 05, 200			, 2001	8.48	APR	05, 2001			05, 2001	6.88
10	8.97	10		8.43		10	7.03		10	7.25
15	8.99	15		8.49		15	7.18		15	7.44
20	9.02	20		8.46		20	6.97		20	7.72
25	8.81	25		8.43		25	7.09		25	8.01
31	8.53	31		8.46		30	7.10		31	8.19
NOV 05	8.31	FEB 05		8.37	MAY	05	6.81	AUG	05	8.43
10	8.42	10		8.37		10	6.68		10	8.67
15	8.23	15		8.22		15	6.73		15	8.84
20	8.45	20		8.18		20	6.81		20	8.99
25	8.36	25		7.80		25	7.04		25	9.20
30	8.33	28		7.51		31	6.73		31	9.44
DEC 05	8.36	MAR 05		7.34	JUN	05	6.01	SEP	05	9.51
10	8.39	10		7.17		10	4.86		10	9.57
15	8.36	15		7.22		15	5.47		15	9.67
20	8.45	20		7.09		20	5.78		20	9.26
25	8.57	25		7.14		25	6.14		25	9.28
31	8.58	31		7.14		30	6.59		30	9.38
WATER YEAR	2001 н	IGHEST	4.86 JUI	N 10, 2001		LOWEST	9.67 SEP	15, 2	001	

THOMAS COUNTY

WELL 08S 34W 01BAC 01 SITE NUMBER 392329101040201

8-34W-1BA. KS. AGRICULTURAL EXPERIMENT STATION. DRILLED, UNUSED, WATER-TABLE WELL IN OGALLALA FORMATION. DIAMETER 16 INCHES, DEPTH 160 FEET. MEASURING POINT, TOP OF 2 INCH PIPE, 2.72 FEET ABOVE LSD. MEASURED BY GMD 4.

ALTITUDE OF LAND SURFACE 3177. FEET

RECORDS AVAILABLE 1947 TO CURRENT YEAR.

HIGHEST WATER LEVEL 112.31 FEET BELOW LAND SURFACE DATUM MAY 20, 1954.

LOWEST WATER LEVEL 134.18 FEET BELOW LAND SURFACE DATUM AUG 22, 2000.

WATER DATE LEVEL	WATER LEVELS DATE	IN FEET BELOW WATER LEVEL		ATER	WATER DATE LEVEL
OCT 20, 2000 134.11 NOV 20 134.11 DEC 20 133.96	JAN 19, 2001 FEB 19 MAR 20	133.52 M			20, 2001 134.81 20 135.25 20 135.25
WATER YEAR 2001 HIG	SHEST 133.40	MAR 20, 2001	LOWEST 135.2	25 AUG 20, 20	01 SEP 20, 2001

DOUGLAS COUNTY

 $390006095132301.\ Local number 12S 20E 17CCB 01$

 $\label{location.--Lat 39} \hbox{00'06", long 95°13'23", Hydrologic Unit 10270104, County Code 045, on east side of county road, 3.6 minortheast of Lawrence. } \\$

AQUIFER.--Unconsolidated aquifer in Newman Terrace deposits of Pleistocene age. Aquifer code: 112NWMN.

WELL CHARACTERISTICS.--Drilled observation well, diameter 10 in., depth 50 ft.

INSTRUMENTATION.--Float gage interfaced to a data-collection platform/data logger with a 1-hour update interval.

DATUM.--Datum of gage is sea level. Measuring point east side of hole in top of box, elevation 835.81 ft, measuring point is 3.6 ft above land surface.

REMARKS.--Water level fluctuates with Kansas River stage and nearby pumping.

PERIOD OF RECORD. -- 1952 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 821.72 ft above sea level, July 25, 1993; lowest, 807.98 ft above sea level, Mar. 30, 1957.

EXTREMES FOR CURRENT YEAR.--Highest water level, 815.51 ft, June 23; lowest, 809.83 ft, Oct. 4.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	809.86 809.86 809.85 809.84 809.83	810.28 810.34 810.38 810.42 810.47	810.86 810.82 810.81 810.81	810.49 810.47 810.47 810.47 810.46	810.69 810.71 810.76 810.77 810.79	812.05 812.09 812.13 812.14 812.15	813.29 813.29 813.29 813.28 813.28	813.74 813.73 813.69 813.72 813.81	813.12 813.24 813.33 813.60 813.93	815.13 815.06 814.99 814.89 814.80	813.38 813.31 813.25 813.20 813.14	812.42 812.37 812.32 812.26 812.22
6 7 8 9 10	809.85 809.86 809.88 809.90	810.55 810.65 810.70 810.77 810.79	810.80 810.81 810.79 810.79 810.78	810.46 810.45 810.44 810.43 810.43	810.81 810.81 810.82 810.94 811.00	812.18 812.20 812.23 812.25 812.28	813.29 813.30 813.28 813.28 813.27	813.85 813.86 813.89 813.92 813.93	814.11 814.24 814.30 814.35 814.40	814.75 814.67 814.57 814.47 814.39	813.07 813.00 812.96 812.91 812.85	812.20 812.19 812.19 812.17 812.16
11 12 13 14 15	809.92 809.92 809.92 809.92 810.01	810.83 810.87 810.88 810.89 810.93	810.77 810.73 810.73 810.72 810.71	810.43 810.43 810.43 810.45 810.45	811.07 811.11 811.15 811.23 811.29	812.28 812.30 812.31 812.31 812.43	813.41 813.44 813.45 813.46 813.63	813.91 813.81 813.74 813.71 813.67	814.43 814.44 814.44 814.39 814.40	814.33 814.35 814.31 814.29 814.27	812.82 812.79 812.75 812.72 812.70	812.14 812.12 812.09 812.06 812.02
16 17 18 19 20	810.06 810.09 810.10 810.11 810.12	810.95 810.95 810.95 810.95 810.94	810.71 810.68 810.68 810.65 810.65	810.45 810.45 810.45 810.45 810.45	811.32 811.34 811.40 811.45 811.46	812.71 812.83 812.93 813.01 813.07	813.70 813.74 813.81 813.90 813.93	813.61 813.55 813.50 813.47 813.46	814.43 814.43 814.43 814.42 814.83	814.25 814.17 814.12 814.07 814.03	812.65 812.61 812.58 812.52 812.47	812.02 812.08 812.28 812.41 812.48
21 22 23 24 25	810.13 810.13 810.13 810.16 810.19	810.93 810.93 810.93 810.93	810.63 810.61 810.61 810.58 810.57	810.45 810.43 810.43 810.43 810.42	811.46 811.49 811.51 811.64 811.78	813.12 813.16 813.19 813.20 813.20	813.93 813.93 813.94 813.90 813.89	813.46 813.43 813.42 813.37 813.31	815.22 815.43 815.49 815.51 815.51	813.99 813.93 813.87 813.79 813.66	812.41 812.34 812.27 812.25 812.29	812.51 812.52 812.56 812.57 812.59
26 27 28 29 30 31	810.21 810.21 810.21 810.23 810.23	810.93 810.92 810.91 810.88 810.86	810.56 810.56 810.55 810.55 810.52	810.43 810.41 810.41 810.48 810.64	811.85 811.91 811.96 	813.22 813.25 813.28 813.29 813.30 813.30	813.89 813.88 813.82 813.77 813.75	813.25 813.19 813.15 813.09 813.08 813.10	815.49 815.40 815.34 815.28 815.22	813.16 813.29 813.35 813.42 813.43	812.42 812.48 812.50 812.50 812.48 812.45	812.61 812.61 812.61 812.57 812.51
MEAN MAX MIN	810.03 810.23 809.83	810.79 810.95 810.28	810.69 810.86 810.51	810.46 810.66 810.41	811.23 811.96 810.69	812.69 813.30 812.05	813.60 813.94 813.27	813.56 813.93 813.08	814.57 815.51 813.12	814.17 815.13 813.16	812.71 813.38 812.25	812.33 812.61 812.02

HARVEY COUNTY

 $380025097312701.\ \mbox{Local}$ number $\mbox{EB-145-A5}$

AQUIFER.--Equus Beds. Aquifer code: 112PLSC.

WELL CHARACTERISTICS .-- Drilled unused water-table well, diameter 2 in., depth 42.61 ft, screened 32.6-42.6 ft.

INSTRUMENTATION. -- Submersible transducer interfaced to a data-collection platform/data logger with a 1-hour update interval.

DATUM.-- Datum of gage is sea level. Measuring point is top of PVC casing, elevation 1,394.26 ft, top of casing is 1.9 ft above land surface.

REMARKS.--Water level fluctuates with river stage and nearby pumping.

PERIOD OF RECORD. -- November 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1,381.31 ft above sea level, June 12, 2001; lowest, 1,370.52 ft above sea level, July 28, 1996.

EXTREMES FOR CURRENT YEAR.--Highest water level, 1,381.31 ft, June 12; lowest, 1,373.64 ft, Sept. 8.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1374.05	1374.86 1374.75 1374.77 1374.94 1375.13	1375.38 1375.37 1375.56 1375.49 1375.60	1375.89 1375.89 1376.19 1376.15 1376.02	1375.63 1375.72 1375.84 1375.59 1375.80	1377.31 1377.30 1377.37 1377.16 1377.16	1378.84 1378.83 1378.71 1378.53 1378.57	1378.84 1378.84 1378.58 1378.74 1378.93	1379.21	1378.17 1377.94 1377.75 1377.48 1377.29	1374.99 1374.93 1374.91 1374.83 1374.75	1373.84 1373.82 1373.73 1373.73 1373.73
6 7 8 9 10	1373.89 1373.92 1373.95 e1374.05 1374.15	1375.03 1374.90 1375.02 1375.05 1375.00	1375.50 1375.79	1376.18 1376.01 e1376.03 e1376.06 e1376.09	1375.60 1375.78 1375.62 1375.40 1375.46	1377.30 1377.34 1377.43 1377.47 1377.63	1378.62 1378.45 1378.50 1378.36 1378.54	1379.06 1378.95 1379.17 1379.41 1379.43	1380.01 1380.37 1380.59 1381.09 1381.23	1377.27 1377.16 1376.98 1376.91 1376.79	1374.68 1374.63 1374.63 1374.56 1374.45	1373.82 1373.84 1373.69 1373.67 1373.67
11	1374.16	1375.19	1375.56	e1376.13	1375.63	1377.58	1378.85	1379.22	1381.22	1376.69	1374.43	1373.68
12	1374.17	1375.08	1375.65	1376.08	1375.52	1377.57	1378.22	1379.10	1381.27	1376.50	1374.35	
13	1374.17	1375.08	1375.87	1376.30	1375.67	1377.45	1378.30	1379.27	1381.20	1376.32	1374.33	
14	1374.18	1375.11	1375.72	1376.00	1375.67	1377.76	1378.47	1379.32	1380.95	1376.29	1374.37	
15	1374.10	1375.38	1376.00	1375.98	1375.76	1377.84	1378.30	1379.45	1380.72	1376.24	1374.33	
16		1375.08	1375.60	1376.01	1375.51	1378.07	1378.22	1379.41	1380.74	1376.14	1374.18	1373.70
17		1375.16	1375.87	1376.06	1375.58	1378.27	1378.22	1379.28	1380.76	1376.05	1374.18	1373.70
18		1375.25	1375.68	1376.22	1375.83	1378.50	1378.55	1379.20	1380.83	1375.99	1374.19	1373.80
19		1375.24	1375.82	1376.05	1375.93	1378.67	1378.89	1379.13	1380.65	1375.86	1374.14	1373.77
20		1375.14	1376.02	1376.15	1375.75	1378.84	1378.79	1379.38	1380.58	1375.79	1374.15	1373.81
21	1374.25	1375.37	1375.68	1376.04	1375.77	1378.95	1378.67	1379.05	1380.38	1375.74	1374.04	1373.73
22	1374.20	1375.34	1375.94	1376.16	1375.87	1378.93	1378.90	1379.11	1380.27	1375.70	1374.00	1373.80
23	1374.16	1375.38	1375.80	1376.18	1376.01	1378.92	1378.61	1379.21	1380.11	1375.60	1374.00	1373.65
24	1374.28	1375.41	1375.74	1376.09	1376.52	1378.66	1378.59	1379.07	1379.89	1375.52	1373.99	1373.68
25	1374.41	1375.42	1375.79	1376.25	1376.26	1378.74	1378.73	1379.00	1379.68	1375.42	1373.92	1373.72
26 27 28 29 30 31	1374.47 1374.49 1374.58 1374.73 1374.69 1374.76	1375.46 1375.42 1375.48 1375.36 1375.61	1375.86 1376.02 1375.98 1375.88 1375.90 1375.91	1376.02 1375.93 1376.06 1376.23 1375.99 1375.69	1377.03	1378.77 1378.87 1379.06 1378.98 1378.93 1378.66	1378.87 1378.75 1378.63 1378.62 1378.72	1379.11 1379.14 1379.01 1379.05 1379.17 1379.11	1379.38 1379.11 1378.94 1378.76 1378.51	1375.34 1375.31 1375.21 1375.21 1375.15 1375.06	1373.90	1373.74 1373.77 1373.76 1373.78 1373.80
MEAN	1374.22	1375.18	1375.74	1376.07	1375.86	1378.11	1378.60	1379.12	1380.11	1376.29	1374.30	1373.74
MAX	1374.76	1375.61	1376.02	1376.30	1377.03	1379.06	1378.90	1379.45	1381.27	1378.17	1374.99	1373.84
MIN	1373.89	1374.75	1375.37	1375.69	1375.40	1377.16	1378.22	1378.58	1378.51	1375.06	1373.82	1373.65

HARVEY COUNTY

 $380027097311401.\ Local number EB-145-A4$

LOCATION.-- Lat 38°00'27", long 97°31'14", Hydrologic Unit 11030012, County Code 079, Halstead quadrangle, on the upstream side of the bridge, north of the levee on Halstead Road in Halstead. Owner: Ground-Water Management District # 2.

AQUIFER.--Equus Beds. Aquifer code: 112PLSC.

WELL CHARACTERISTICS .-- Drilled unused water-table well, diameter 2 in., depth 61.81 ft, screened 51.8-61.8 ft.

INSTRUMENTATION.--Submersible transducer interfaced to a data-collection platform/data logger with a 1-hour update interval.

DATUM.-- Datum of gage is sea level. Measuring point is top of PVC casing, elevation 1,394.00 ft, top of casing is 1.8 ft above land surface.

REMARKS.--Water level fluctuates with river stage and nearby pumping.

PERIOD OF RECORD. -- October 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1,380.63 ft above sea level, Nov. 5, 1998; lowest, 1,363.48 ft above sea level, July 22, 1996.

EXTREMES FOR CURRENT YEAR. -- Highest water level, 1,377.90 ft, June 18; lowest, 1,369.19 ft, Sept. 26.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1373.68 1373.55 1373.51 1373.47 1373.56	1375.32 1375.25 1375.24 1375.35 1375.50	1375.02 1374.91 1375.05 1375.08 1375.09	1375.06 1375.00 1375.23 1375.26 1375.18	1370.22 1370.09 1370.14 1369.97 1370.01	1372.69 1372.35 1372.20 1371.90 1371.73	1371.81 1371.77 1371.66 1371.48 1371.49	1376.39 1376.45 1376.32 1376.50 1376.71	1375.35	1370.39 1370.42 1370.09 1369.86 1369.92	1373.11 1372.84 1372.72	e1372.72 e1372.59 e1372.63 1372.78 e1372.91
6	1373.43	1375.44	1375.12	1375.35	1369.88	1371.72	1371.51	1376.99	1374.43	1373.86	1372.78	1373.04
7	1373.49	1375.14	1375.32	1375.14	1369.90	1371.64	1371.41	1376.97	1374.58	1374.19	1372.61	1373.14
8	1373.53	1375.14	1375.03	1375.13	1369.81	1371.61	1371.36	1377.04	1374.62	1374.22	1372.62	1373.10
9	1373.67	1375.21	1375.24	1375.09	1369.76	1371.52	1371.26	1374.26	1375.61	1374.26	1372.67	1373.06
10	1373.80	1375.05	1375.13	1375.22	1369.69	1371.56	1371.33	1372.95	1375.72	1374.50	1372.66	1373.08
11 12 13 14 15	1373.82 1373.77 1373.83 1373.88 1373.84		1375.07 1374.96 1375.23 1375.06 1375.31	1375.24 1375.19 1375.38 1375.19 1375.09	1369.77 1369.74 1369.87 1370.06 1370.09	1371.44 1371.49 1371.71 1371.96 1372.42	1371.73 1371.45 1371.49 1371.53 1371.54	1376.41 1376.56 1376.75 1376.81 1376.90	1375.52 1375.15 1374.68 1374.17 1373.71	1374.14 1374.04 1373.89 1374.04 1373.86		
16	1373.93	1375.06	1375.08	1375.15	1369.93	1373.30	1371.47	1376.89	1377.51	1373.83	1372.18	
17	1373.92	1375.01	1375.09	1375.10	1369.88	1373.79	1371.38	1376.76	1377.75	1373.89	1372.51	
18	1373.89	1375.04	1375.11	1375.25	1370.01	1374.07	1371.52	1376.68	1377.83	1373.71	1372.81	
19	1373.96	1375.09	1375.04	1371.74	1370.10	1373.72	1371.71	1376.32	1377.68	1373.60	1372.60	
20	1373.99	1374.91	1375.31	1374.88	1369.94	1372.60	1371.54	1376.70	1377.66	1373.46	1372.49	
21	1374.00	1375.10	1374.98	1374.98	1369.88	1373.18	1375.42	1376.63	1373.65	1373.65	1372.51	1370.44
22	1374.00	1375.08	1375.10	1375.10	1369.95	1372.97	1376.04	1376.66	1373.63	1373.61	1372.67	1370.02
23	1374.01	1375.16	1375.25	1375.16	1370.07	1372.75	1376.04	1376.75	1373.74	1373.37	1372.81	1369.66
24	1374.12	1375.14	1374.95	1375.11	1371.24	1372.39	1376.10	1376.63	1373.74	1373.21	1372.87	1369.39
25	1371.90	1375.17	1375.02	1372.30	1371.96	1372.30	1376.29	1376.62	1372.89	1373.40	e1372.93	1369.29
26 27 28 29 30 31		1375.15 1375.08 1375.13 1374.95 1375.16	1375.06 1375.17 1375.21 1375.07 1375.08 1375.08	1371.18 1370.79 1370.75 1370.82 1370.66 1370.36	1372.90	1372.19 1372.16 1372.20 1372.09 1371.96 1371.75		1376.67 1376.69 1376.62 1376.67 1376.92 e1373.92	1372.03 1371.68 1371.56 1371.11 1370.68	1373.50 1373.46 1373.26 1373.18	e1372.86 e1372.66	1369.24 1372.71 1373.19 1373.53 1373.60
MEAN	1373.88	1375.15	1375.10	1374.10	1370.39	1372.30	1372.90	1376.39	1374.28	1374.50	1372.70	1372.20
MAX	1375.26	1375.50	1375.32	1375.38	1373.23	1374.07	1376.41	1377.04	1377.83		1373.19	1373.60
MIN	1371.88	1374.91	1374.91	1370.36	1369.69	1371.44	1371.26	1372.95	1370.68		1372.18	1369.24

HARVEY COUNTY

 $380028097310901.\ {\tt Local}\ {\tt number}\ {\tt EB-145-A2}$

LOCATION.-- Lat 38°00'28", long 97°31'09", Hydrologic Unit 11030012, County Code 079, Halstead quadrangle, on the upstream side of the bridge, north of the levee on Halstead Road in Halstead. Owner: Ground-Water Management District # 2.

AQUIFER.--Equus Beds. Aquifer code: 112PLSC.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2 in., depth 46.35 ft, screened 36.2-46.2 ft.

INSTRUMENTATION. -- Submersible transducer interfaced to a data-collection platform/data logger with a 1-hour update interval.

DATUM.-- Datum of gage is sea level. Measuring point is top of PVC casing, elevation 1,392.68 ft, top of casing is 1.6 ft above land surface.

REMARKS.--Water level fluctuates with river stage and nearby pumping.

PERIOD OF RECORD. -- October 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1,381.34 ft above sea level, Nov. 4, 1998; lowest, 1,364.17 ft above sea level, July 22, 1996.

EXTREMES FOR CURRENT YEAR. -- Highest water level, 1,377.62 ft, June 18; lowest, 1,369.52 ft, Sept. 26.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1373.62	1375.31 1375.25 1375.27 1375.34 1375.46	1374.93 1374.83 1374.98 1375.00 1375.02	1374.97 1374.92 1375.16 1375.19 1375.10	1370.28 1370.16 1370.21 1370.02 1370.07	1372.76 1372.40 1372.25 1371.95 1371.80	1371.87 1371.82 1371.72 1371.56 1371.57	1376.19 1376.25 1376.12 1376.31 1376.51	1372.84 1372.36 1375.22 1373.75 1372.92		1373.30 1373.06	1372.82 e1372.85 e1372.85 1372.93 1373.01
6 7 8 9 10	1373.49 1373.56 1373.60 1373.73 1373.85	1375.38 1375.09 1375.09 1375.14 1374.98	1375.05 1375.24 1374.95 1375.17 1375.05	1375.26 1375.05 1375.04 1375.00 1375.14	1369.94 1369.97 1369.86 1369.81 1369.76	1371.78 1371.70 1371.65 1371.57 1371.61	1371.60 1371.50 1371.46 1371.35 1371.43	1376.80 1376.75 1376.82 1374.28 1372.96	1374.44 1374.42 1374.65 1375.82 1375.95	1373.90 1374.21 1374.26 1374.31 1374.53	1372.99 1372.82 1372.83 1372.87 1372.86	1373.20 1373.28 1373.25 1373.21 1373.23
11 12 13 14 15	1373.91	1375.11 1375.04 1374.99 1374.97 1375.22	1374.98 1374.89 1375.15 1374.97 1375.23	1375.15 1375.10 1375.30 1375.09 1375.00	1369.84 1369.79 1369.94 1370.15 1370.17	1371.49 1371.67 1372.05 1372.20 1372.67	1371.83 1371.61 1371.60 1371.63 1371.64	1376.17 1376.33 1376.51 1376.58 1376.67	1375.70 1375.13 1374.59 1374.06 1373.62	1374.22 1374.12 1374.00 1374.15 1373.99		1373.23 1373.31 1373.28 1373.27 1373.31
16 17 18 19 20		1374.99 1374.94 1374.97 1375.02 1374.83	1374.98 1375.02 1375.01 1374.95 1375.22	1375.05 1375.02 1375.15 1371.95 1374.78	1370.03 1369.97 1370.09 1370.15 1369.99	1373.64 1374.22 1374.47 1373.85 1372.73	1371.55 1371.47 1371.60 1371.77 1371.60			1373.97 1374.02 1373.86 1373.76 1373.62	1373.00	1373.38 1373.41 e1373.09 1371.58 1371.65
21 22 23 24 25	1374.02 1374.01 1374.02 1374.13 1372.26	1375.02 1375.00 1375.08 1375.06 1375.09	1374.89 1375.03 1375.00 1374.87 1374.94	1374.89 1375.01 1375.06 1375.01 1372.40	1369.96 1370.03 1370.15 1371.51 1372.43	1373.21 1372.99 1372.77 1372.42 1372.34	1375.21 1375.82 1375.83 1375.89 1376.08	1376.40 1376.44 1376.53 1376.41 1376.40	1373.72 1373.96 1374.14 1373.93 1372.92	1373.81 1373.75 1373.54 1373.39 1373.56	1372.70 1372.85 1372.97 1373.04 1373.10	1371.04 1370.44 1370.01 1369.68 1369.60
26 27 28 29 30 31		1375.07 1375.01 1375.05 1374.88 1375.09	1374.97 1375.09 1375.13 1374.99 1375.00 1374.99	1371.25 1370.87 1370.82 1370.91 1370.71 1370.42	1373.06	1372.23 1372.20 1372.24 1372.13 1372.01 1371.81	1376.21 1372.35 1375.48 1375.85 1376.06	1376.45 1376.47 1376.40 1376.46 1376.71 1373.92	1372.05 1371.77 1371.63 1371.22 1370.82	1373.63 1373.46 1373.37	1372.98 1372.96 1373.05 1372.83 1372.97 1373.08	1369.52 1372.82 1373.31 1373.54 1373.67
MEAN MAX MIN	1373.95 1375.27 1372.26	1375.09 1375.46 1374.83	1375.02 1375.24 1374.83	1374.06 1375.30 1370.42	1370.52 1373.67 1369.76	1372.41 1374.47 1371.49	1372.90 1376.21 1371.35	1376.20 1376.82 1372.96	1374.29 1377.56 1370.82	1373.28 1374.53 1370.08	1372.90 1373.37 1372.43	1372.46 1373.67 1369.52

HARVEY COUNTY

380028097311001. Local number EB-145-A1

LOCATION.-- Lat 38°00'28", long 97°30'52", Hydrologic Unit 11030012, County Code 079, Halstead quadrangle, on the upstream side of the bridge, north of the levee on Halstead Road in Halstead. Owner: Ground-Water Management District # 2.

AQUIFER.--Equus Beds. Aquifer code: 112PLSC

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2 in., depth 50.65 ft, screened 40.6-50.6 ft.

INSTRUMENTATION. -- Submersible transducer interfaced to a data-collection platform/data logger with a 1-hour update interval.

DATUM.-- Datum of gage is sea level. Measuring point is top of PVC casing, elevation 1,392.87 ft, top of casing is 2.8 ft above land surface.

REMARKS.--Water level fluctuates with river stage and nearby pumping.

PERIOD OF RECORD. -- October 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1,382.63 ft above sea level, Nov. 4, 1998; lowest, 1,366.10 ft above sea level, July 22, 1996.

EXTREMES FOR CURRENT YEAR. -- Highest water level, 1,377.45 ft, June 18; lowest, 1,370.42 ft, Sept. 26.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1373.82	1375.42 1375.40 1375.45 1375.46 1375.53	1375.01 1374.92 1375.06 1375.07 1375.09	1375.04 1374.99 1375.20 1375.22 1375.13	1370.99 1370.88 1370.92 1370.74 1370.78		1372.43	1376.02 1376.07 1375.94 1376.13 1376.32	1375.40	1371.53 1371.50 1371.25 1371.03 1371.06	1373.60 1373.54 1373.34 1373.24 1373.26	1373.02
6 7 8 9 10	1373.78 1373.82 1373.94	1375.43 1375.15 1375.15 1375.19 1375.05	1375.11 1375.29 1375.02 1375.22 1375.10	1375.29 1375.09 1375.08 1375.04 1375.16	1370.66 1370.68 1370.59 1370.54 1370.49	1372.45 1372.36 1372.30 1372.21 1372.24	1372.22 1372.13 1372.08 1371.98 1372.05	1376.64 1376.56 1376.65 1374.66 1373.42	1374.92 1375.32 1376.76	1374.15 1374.43 1374.46 1374.50 1374.69	1373.27 1373.12 1373.13 1373.14 1373.13	1373.42 1373.49 1373.46 1373.41 1373.43
11	1374.05	1375.16	1375.04	1375.18	1370.56	1372.13	1372.43	1376.09	1376.59	1374.43	1373.05	1373.44
12	1374.02	1375.09	1374.96	1375.14	1370.52	1372.50	1372.31	1376.20	1375.75	1374.33	1372.95	1373.51
13	1374.05	1375.05	1375.19	1375.32	1370.67	1373.08	1372.25	1376.42	1375.11	1374.20	1373.01	1373.48
14	1374.11	1375.04	1375.03	1375.13	1370.90	1373.08	1372.23	1376.50	1374.62	1374.32	1373.07	1373.50
15	1374.06	1375.27	1375.27	1375.05	1370.92	1373.48	1372.24	1376.54	1374.15	1374.19	1373.01	1373.51
16	1374.16	1375.05	1375.03	1375.08	1370.81	1374.63		1376.58	1377.04	1374.17	1372.79	1373.57
17	1374.12	1375.01	1375.08	1375.08	1370.73	1375.34		1376.44	1377.26	1374.20	1373.03	1373.58
18	1374.09	1375.04	1375.06	1375.18	1370.83	1375.53		1376.33	1377.40	1374.06	1373.25	1373.49
19	1374.15	1375.09	1375.02	1372.55	1370.86	1374.55		1376.10	1377.28	1373.99	1373.08	1373.01
20	1374.16	1374.91	1375.25	1374.84	1370.70	1373.55		1376.41	1377.26	1373.87	1372.98	1373.10
21	1374.17	1375.09	1374.97	1374.93	1370.71	1373.81	1375.12	1376.31	1374.59	1374.02	1372.95	1372.18
22	1374.17	1375.06	1375.10	1375.04	1370.76	1373.58	1375.69	1376.40	1375.27	1373.97	1373.06	1371.35
23	1374.20	1375.12	1375.05	1375.09	1370.90	1373.37	1375.70	1376.41	1375.56	1373.79	1373.16	1370.92
24	1374.30	1375.12	1374.95	1375.04	1372.45	1373.04	1375.76	1376.35	1375.01	1373.65	1373.27	1370.68
25	1373.12	1375.14	1375.01	1373.00	1373.69	1372.96	1375.94	1376.35	1373.82	1373.78	1373.32	1370.53
26 27 28 29 30 31	1375.27 1375.40	1374.96	1375.04 1375.14 1375.17 1375.05 1375.06 1375.06	1371.83 1371.50 1371.45 1371.49 1371.33 1371.11	1374.87 1373.86 	1372.86 1372.92 1372.86 1372.74 1372.63 1372.44	1376.06 1372.83 1375.38 1375.72 1375.90	1376.39 1376.49 1376.34 1376.44 1376.60 1374.53		1373.80 1373.89 1373.88 1373.71 1373.63 1373.59	1373.22 1373.22 1373.30 1373.11 1373.21 1373.30	1370.45 1373.09 1373.53 1373.74 1373.86
MEAN		1375.16	1375.08	1374.25	1371.32	1373.13	1373.28	1376.15	1374.92	1373.62	1373.16	1372.91
MAX		1375.53	1375.29	1375.32	1374.87	1375.53	1376.06	1376.65	1377.40	1374.69	1373.60	1373.86
MIN		1374.91	1374.92	1371.11	1370.49	1372.13	1371.98	1373.42	1371.75	1371.03	1372.79	1370.45

HARVEY COUNTY

380028097311002. Local number EB-145-PD5

 $\label{location.--Lat 38} \ ^{\circ}00'28", \ long \ 97^{\circ}31'07", \ Hydrologic \ Unit \ 11030012, \ County \ Code \ 079, \ Halstead \ quadrangle, \ on the upstream side of the bridge, north of the levee on Halstead Road in Halstead. Owner: Ground-Water Management District <math>\#\ 2$.

AQUIFER.--Equus Beds. Aquifer code: 112PLSC.

WELL CHARACTERISTICS. -- Drilled unused water-table well, diameter 2 in., depth 117.70 ft, screened 112.6-117.7 ft.

INSTRUMENTATION. -- Submersible transducer interfaced to a data-collection platform/data logger with a 1-hour update interval.

DATUM.-- Datum of gage is sea level. Measuring point is top of PVC casing, elevation 1,392.40 ft, top of casing is 2.00 ft above land surface.

REMARKS.--Water level fluctuates with river stage and nearby pumping.

PERIOD OF RECORD. -- February 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1,381.35 ft above sea level, Nov. 5, 1998; lowest, 1,356.52 ft above sea level, July 22, 1996.

EXTREMES FOR CURRENT YEAR.--Highest water level, 1,376.90 ft, May 9; lowest, 1,364.07 ft, Jan. 19.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1373.48 1373.36 1373.36 1373.28 1373.38	1375.09 1375.18	1374.82	1374.99 1375.03	1365.66 1365.52 1365.58 1365.41 1365.42	1368.07 1367.73 1367.58 1367.30 1367.12	1366.88 1366.84 1366.72 1366.54 1366.52	1376.14 1376.20 1376.08 1376.26 1376.45	1367.12 1375.34 1366.67	1364.52	1372.52	1372.24 1372.37 1372.61
6 7 8 9 10		1374.97 1374.96 1375.02	1374.89 1375.07 1374.81 1375.00 1374.90	1374.91 1374.90 1374.86	1365.28 1365.19	1367.07 1366.98 1366.93 1366.83 1366.85	1366.45 1366.39 1366.29	1368.91	1369.32 1369.43	1373.92 1374.06	1372.26 1372.24 1372.48	1372.99 1372.97 1372.93
11 12 13 14 15			1374.83		1365.18 1365.14 1365.26 1365.46 1365.49	1366.73 1366.77 1366.97 1367.18 1367.72	1366.47 1366.48 1366.54	1376.50 1376.55	1370.31 1369.92 1369.45 e1368.95 e1368.49	1373.71 1373.73 1373.83	1372.34	1373.02 1373.00 1373.04
16 17 18 19 20	1373.70		1374.86 1374.86 1374.89 1374.81 1375.07		1365.34 1365.28 1365.40 1365.49 1365.31	1368.63 1369.09 1369.35 1368.95 1365.81		1376.49 1376.38 1375.85	e1371.38 e1371.60 e1371.74 e1371.62 e1371.60	1373.76 1373.44 1373.30	1372.33 e1372.61 e1372.44	1365.80 1366.09
21 22 23 24 25	1373.82	1374.94 1374.92	1374.77 1374.87 1374.87 1374.74 1374.81	1374.92 1374.87	1365.46 1366.75	1368.39 1368.15 1367.91 1367.56 1367.44	1375.28 1375.80 1375.81 1375.84 1376.03	1376.48 1376.38	1368.41 1368.50 1368.65	1373.27 1373.04 1372.87	e1372.31 e1372.42 e1372.64 1372.70 1372.70	1365.35 1364.99
26 27 28 29 30 31	1365.19 1374.91 1375.11	1374.90 1374.75 1374.92	1374.86 1374.86	1366.40 1366.45	1368.47 1368.72 1368.31 	1367.28 1367.16 1367.03	1367.27 1375.49 1375.83 1376.02	1376.37	1366.31 1366.11 1365.72 1365.16	1373.38 1373.21 1372.95	1372.65 1372.54 1372.59 1372.27 1372.63 1372.77	1373.24 1373.43
MEAN MAX MIN			1375.07		1368.72	1367.48 1369.35 1365.81		1376.79	1368.98 1375.34 1365.16		1372.45 1373.07 1371.81	1373.54

HARVEY COUNTY

380028097311101. Local number EB-145-A3

LOCATION.-- Lat 38°00'28", long 97°31'11", Hydrologic Unit 11030012, County Code 079, Halstead quadrangle, on the upstream side of the bridge, north of the levee on Halstead Road in Halstead. Owner: Ground-Water Management District # 2.

AQUIFER.--Equus Beds. Aquifer code: 112PLSC.

WELL CHARACTERISTICS. -- Drilled unused water-table well, diameter 2 in., depth 71.20 ft, screened 61.2-71.2 ft.

INSTRUMENTATION.--Submersible transducer interfaced to a data-collection platform/data logger with a 1-hour update interval.

DATUM.-- Datum of gage is sea level. Measuring point is top of PVC casing, elevation 1,392.82 ft, top of casing is 2.3 ft above land surface.

REMARKS.--Water level fluctuates with river stage and nearby pumping.

PERIOD OF RECORD. -- October 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1,380.93 ft above sea level, Nov. 5, 1998; lowest, 1,362.56 ft above sea level, July 22, 1996.

EXTREMES FOR CURRENT YEAR. -- Highest water level, 1,377.72 ft, June 18; lowest, 1,368.52 ft, Sept. 26.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1373.63	1375.25	1374.93	1374.98	1369.46	1371.96	1371.07	1376.29	1371.93	1369.65	1373.17	1372.57
2	1373.50	1375.19	1374.82	1374.92	1369.34	1371.62	1371.02	1376.35	1371.48	1369.68	1373.09	1372.57
3	1373.48	1375.18	1374.96	1375.15	1369.39	1371.47	1370.91	1376.22	1375.27	1369.34	1372.81	1372.55
4	1373.43	1375.27	1374.99	1375.18	1369.22	1371.17	1370.73	1376.41	1372.63	1369.11	1372.68	1372.74
5	1373.52	1375.41	1375.00	1375.10	1369.25	1371.01	1370.74	1376.61	1372.08	1369.19	1372.76	1372.82
6	1373.39	1375.36	1375.03	1375.26		1370.98	1370.76	1376.90	1373.62	1373.88	1372.75	1373.01
7	1373.45	1375.06	1375.22	1375.05		1370.89	1370.67	1376.87	1373.70	1374.17	1372.56	1373.10
8	1373.48	1375.06	1374.94	1375.04		1370.86	1370.62	1376.93	1373.80	1374.18	1372.56	1373.07
9	1373.62	1375.12	1375.14	1375.00		1370.77	1370.52	1373.45	1374.82	1374.24	1372.64	1373.03
10	1373.74	1374.96	1375.03	1375.14		1370.81	1370.59	1372.16	1374.94	1374.48	1372.62	1373.04
11	1373.76	1375.07	1374.98	1375.14	1369.02	1370.68	1370.98	1376.31	1374.72	1374.10	1372.51	1373.02
12	1373.71	1375.01	1374.87	1375.10	1368.98	1370.76	1370.72	1376.45	1374.31	1374.00	1372.37	1373.13
13	1373.77	1374.97	1375.14	1375.28	1369.12	1371.03	1370.75	1376.64	1373.81	1373.87	1372.50	1373.10
14	1373.82	1374.95	1374.97	1375.10	1369.32	1371.25	1370.79	1376.69	1373.30	1374.02	1372.46	1373.13
15	1373.78	1375.20	1375.21	1375.00	1369.34	1371.75	1370.81	1376.79	1372.85	1373.83	1372.38	1373.14
16	1373.88	1374.97	1374.99	1375.12	1369.19	1372.65	1370.73	1376.77	1377.36	1373.80	1372.14	1373.21
17	1373.87	1374.92	1375.00	1375.01	1369.13	1373.15	1370.63	1376.64	1377.58	1373.88	1372.49	1373.25
18	1373.84	1374.95	1375.02	1375.15	1369.26	1373.42	1370.76	1376.56	1377.66	1373.68	1372.78	1371.18
19	1373.91	1375.00	1374.95	1370.62	1369.34	1373.01	1370.95	1376.18	1377.56	1373.57	1372.55	1370.17
20	1373.93	1374.82	1375.22	1374.79	1369.18	1371.58	1370.78	1376.57	1377.53	1373.42	1372.43	1370.26
21 22 23 24 25	1373.96	1375.01 1374.99 1375.07 1375.04 1375.07		1374.90 1375.01 1375.07 1375.01 1371.19	1369.13 1369.20 1369.33 1370.56 1371.34	1372.23 1372.01 1371.65	1375.35 1375.94 1375.95 1376.00 1376.19	1376.63	1372.89	1373.64 1373.56 1373.33 1373.17 1373.38	1372.46 1372.63 1372.77 1372.84 1372.90	1368.98
26 27 28 29 30 31		1374.87	1374.98 1375.09 1375.13 1374.99 1375.00	1370.37 1370.06 1370.02 1370.09 1369.93 1369.64	1372.61 1372.20	1371.45 1371.41 1371.45 1371.34 1371.21 1371.01		1376.55 1376.57 1376.50 1376.55 1376.81 1373.04	1371.16 1370.90 1370.77 1370.32 1369.89	1373.40 1373.48 1373.43 1373.23 1373.14 1373.13	1372.78 1372.73 1372.83 1372.59 1372.77 1372.90	1368.54 1372.75 1373.26 1373.45 1373.58
MEAN MAX MIN	1373.77 1375.20 1370.86	1375.06 1375.41 1374.82	1375.01 1375.22 1374.82	1373.82 1375.28 1369.64	1369.66 1372.61 1368.93		1372.35 1376.32 1370.52		1373.59 1377.66 1369.89	1373.00 1374.48 1369.11	1372.66 1373.17 1372.14	

HARVEY COUNTY

380643097353001. Local number 07143665

LOCATION.--Lat 38°06'43", long 97°35'30", Hydrologic Unit 11030012, County Code 079, Halstead quadrangle, at the downstream side of the county bridge, 0.4 mile south of Alta Mills, 0.8 mile downstream from Sand Creek, and at mile 50.1. Owner: U.S. Geological Survey.

AQUIFER.--Equus Beds. Aquifer code: 112PLSC.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2 in., depth 40.1 ft, screened 30.1-40.1 ft.

INSTRUMENTATION. -- Submersible transducer interfaced to a data-collection platform/data logger with a 1-hour update interval.

DATUM.--Datum of gage is sea level. Measuring point is top of casing, elevation 1,416.97 ft, top of casing is 1.5 ft above land surface.

REMARKS. -- Water level fluctuates with river stage.

PERIOD OF RECORD. -- February 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1,415.93 ft above sea level, June 11, 1995; lowest, 1,392.31 ft above sea level, Aug. 16, 2001.

EXTREMES FOR CURRENT YEAR.--Highest water level, 1,405.90 ft, June 23; lowest, 1,392.31 ft, Aug. 16.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1394.19 1394.15 1394.15 1394.11 1394.13	1395.89 1396.38 1396.46 1396.17 1395.97	1394.85 1394.83 1394.88 1394.84 1394.87	1394.70 1394.73 1394.77 1394.77	1394.80 1394.91 1394.98 1394.87 1394.90	1399.74 1398.95 1398.66 1398.42 1398.23	1397.04 1396.93 1396.80 1396.83 1396.85	1395.96 1395.90 1395.80 1395.83 1395.84	1396.93 1396.59 1397.22 1397.00 1396.94	1395.52 1395.15 1395.23 1395.39 1395.17	1393.12 1393.14 1393.85 1393.11 1392.87	1392.40 1392.54 1392.65 1392.69 1392.66
6 7 8 9 10	1394.10 1394.11 1394.12 1394.16 1394.19	1395.71 1395.48 1395.41 1395.35 1395.25	1394.86 1394.92 1394.80 1394.89 1394.80	1394.80 1394.72 1394.74 1394.72 1394.78	1394.86 1394.90 1394.86 1394.85 1394.91	1398.01 1397.75 1397.51 1397.31 1397.18	1396.85 1396.79 1396.73 1396.59 1396.58	1395.82 1395.81 1395.82 1395.83 1395.79	1397.81 1397.50 1401.05 1404.26 1405.40	1395.26 1394.95 1394.57 1394.31 1394.39	1392.72 1392.61 1392.66 1393.28 1393.44	1393.29 1393.34 1393.35 1393.35
11 12 13 14 15	1394.19 1394.19 1394.19 1394.21 1394.22	1395.27 1395.20 1395.15 1395.12 1395.22	1394.77 1394.80 1394.86 1394.77 1394.86	1394.78 1394.78 1394.86 1394.76 1394.72	1394.91 1394.91 1394.96 1395.26 1395.52	1397.03 1399.46 1400.93 1400.37 1399.89	1396.78 1397.75 1397.40 1397.15 1396.98	1395.67 1395.63 1395.63 1395.60 1395.60	1405.12 1402.05 1400.51 1399.42 1398.70	1395.17 1395.08 1394.22 1393.96 1393.72	1392.65 1392.51 1392.41 1392.35 1392.33	1393.36 1393.37 1393.37 1393.38 1393.38
16 17 18 19 20	1394.31 1394.31 1394.31 1394.32 1394.30	1395.07 1395.05 1395.07 1395.04 1394.98	1394.73 1394.86 1394.76 1394.81 1394.84	1394.72 1394.73 1394.74 1394.73 1394.76	1395.84 1395.81 1395.84 1395.58 1395.51	1403.21 1405.60 1405.18 1401.78 1400.48	1396.87 1396.69 1396.65 1396.64 1396.51	1395.56 1395.50 1395.47 1395.44 1395.50	1398.25 1397.88 1397.97 1397.43 1397.11	1394.59 1394.74 1394.80 1393.80 1393.73	1393.23	1393.40 1393.42 1396.96 1399.60 1400.05
21 22 23 24 25	1394.30 1394.30 1394.31 1394.35 1394.64	1395.03 1395.00 1395.00 1394.99 1394.98		1394.67 1394.69 1394.68 1394.65 1394.67	1395.85 1395.97 1396.07 1398.77 1401.86	1399.65 1399.08 1398.61 1398.17 1397.92	1396.39 1396.39 1396.23 1396.18 1396.23	1395.39 1395.40 1395.44 1395.38 1395.35	1400.06 1404.49 1405.70 1402.75 1399.98		1392.47 1392.37 1392.33 1392.58 1392.44	1398.48 1397.15 1396.41 1395.95 1395.69
26 27 28 29 30 31	1396.66 1396.71 1396.09 1395.94 1396.12 1396.03	1394.97 1394.93 1394.93 1394.87 1394.95	1394.72 1394.78 1394.76 1394.71 1394.72 1394.71	1394.67 1394.63 1394.74 1394.82 1394.77	1404.32 1404.03 1401.06	1397.72 1397.56 1397.47 1397.34 1397.24 1397.07	1396.22 1396.13 1396.05 1396.00 1395.97	1395.35 1395.34 1395.29 1395.32 1395.39 1396.19	1398.62 1397.91 1397.35 1396.24 1396.02	1393.15 1393.22 1393.46 1393.50 1393.39 1393.14		1395.49 1395.30 1395.14 1395.02 1394.92
MEAN MAX MIN	1394.63 1396.71 1394.10	1395.30 1396.46 1394.87	1394.80 1394.92 1394.71	1394.74 1394.86 1394.63	1396.46 1404.32 1394.80	1399.15 1405.60 1397.03	1396.64 1397.75 1395.97	1395.61 1396.19 1395.29	1399.48 1405.70 1396.02	1394.22 1395.52 1393.14	1392.78 1393.85 1392.32	1394.65 1400.05 1392.40

RENO COUNTY

375647097462804. Local number 07143330

LOCATION.--Lat 37°56'47", long 97°46'29", Hydrologic Unit 11030010, County Code 155, Halstead quadrangle, on right bank at downstream side of county highway bridge, 3.0 mi north of Haven, 4.5 mi downstream from Cow Creek, 11 mi southeast of Hutchinson, and at mile 800.3. Owner: U.S. Geological Survey.

AQUIFER.--Equus Beds. Aquifer code: 112PLSC.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2 in., depth 30 ft, screened 20-30 ft.

INSTRUMENTATION. -- Submersible transducer interfaced to a data-collection platform/data logger with a 1-hour update interval.

DATUM.--Datum of gage is sea level. Measuring point is top of casing, elevation 1,467.18 ft, top of casing is 3.06 ft above land surface.

REMARKS.--Water level fluctuates with river stage.

PERIOD OF RECORD. -- October 1988 to September 2001 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1,465.40 ft above sea level, Apr. 4, 1988; lowest, 1,456.06 ft above sea level, Aug. 9, 1996.

EXTREMES FOR CURRENT YEAR.--Highest water level, 1,461.10 ft, June 13; lowest, 1,456.82 ft, Sept. 15.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1456.89 1456.89	1457.40 1457.33	1457.16 1457.14 1457.14 1457.14 1457.14	1457.55 1457.67	1457.19 1457.19	1459.98 1459.49 1458.67 1458.40 1458.26	1457.79 1457.78 1457.79 1457.78 1457.77	1457.80 1457.78 1457.76	e1458.02 1458.45 1458.76 e1459.24 1459.34	1458.01 1457.96	1457.18	1456.94 1456.92 1456.90 1456.91 1456.88
6 7 8 9 10	1456.90 1456.90 1456.90	1457.25 1457.24	1457.14 1457.13 1457.13		1457.21 1457.22	1457.95	1457.75 1457.75 1457.73 1457.73 1457.71	1458.03 1459.15 1459.59	e1458.90 e1459.05 e1459.55 e1460.00 e1460.35	1457.78		
11 12 13 14 15	1456.90 1456.90 1456.93	1457.21 1457.23 1457.22 1457.21 1457.21	1457.51 1457.78 1457.85	1457.10 1457.09 1457.10 1457.10 1457.10	1457.23 1457.28 1457.30 1457.40 1457.50	1457.94	1457.79 1457.73 1457.71 1457.70 1458.27	1458.72 1458.66 1458.54	e1460.70 e1460.95 e1461.10 e1460.90 e1460.20	1457.70 1457.67 1457.64 1457.62 1457.59	1457.06	1456.83
16 17 18 19 20	1456.93	1457.21 1457.20 1457.19 1457.19 1457.18		1457.09 1457.10 1457.10 1457.11 1457.08	1457.52 1457.50 1457.49 1457.51 1457.49	1459.25 1459.37 1459.05 1458.62 1458.28	1458.23 1458.02 1457.90 1457.84 1457.83	1458.15 1458.06 1457.98	e1459.50 e1459.15 e1458.90 e1458.75 e1458.65	1457.60 1457.57 1457.51 1457.46 1457.42	1457.01 1457.00 1457.07 1457.02 1456.99	1456.86 1456.87 1457.03 1457.22 1458.37
21 22 23 24 25	1456.92 1456.97 1456.97	1457.18 1457.18		1457.10 1457.09 1457.09 1457.09 1457.09	1457.48 1457.49 1457.49 1457.84 1458.94	1458.13 1458.07 1458.01 1457.96 1457.91	1457.80 1457.77 1457.76 1457.79 1458.09	1457.86 1457.80 1457.76	e1458.70 e1458.90 e1459.20 e1459.30 e1458.45		1456.97 1456.95 1456.94 1456.95 1456.96	
26 27 28 29 30 31	1459.11 1458.45 1457.86	1457.16	1457.66 1457.70	1457.19	1460.20	1457.85	1458.33 1458.14 1458.02 1457.90 1457.84	1457.67 1457.66 1457.63		1457.31 1457.31 1457.28	1456.95 1457.37 1457.15 1457.02	1457.71
MEAN MAX MIN	1459.18	1457.23 1457.49 1457.16		1457.67		1458.30 1459.98 1457.81	1457.87 1458.33 1457.70	1458.12 1459.59 1457.63		1457.61 1458.10 1457.28	1457.08 1457.50 1456.94	

RENO COUNTY

380842098063701. Local number 07142680

 $\hbox{LOCATION.--Lat 38°08'42", long 98°06'37", Hydrologic Unit 11030011, County Code 155, Halstead quadrangle, on the upstream side of the bridge, north of Highway K96, west of Nickerson, and at mile 825.8. Owner: U.S. Geological Survey. } \\$

AQUIFER.--Equus Beds. Aquifer code: 112PLSC.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2 in., depth 47.0 ft, screened 37-47 ft.

INSTRUMENTATION. -- Submersible transducer interfaced to a data-collection platform/data logger with a 1-hour update interval.

DATUM.--Datum of gage is sea level. Measuring point is top of casing, elevation 1,603.68 ft, top of casing is 2.0 ft above land surface.

REMARKS.--Records good. Water level fluctuates with river stage.

PERIOD OF RECORD. -- July 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1,596.70 ft above sea level, June 12, 2001; lowest, 1,590.95 ft above sea level, Sept. 14, 2001.

EXTREMES FOR CURRENT YEAR. -- Highest water level, 1,596.70 ft, June 12; lowest, 1,590.95 ft, Sept. 14.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1591.12 1591.11 1591.11 1591.10 1591.12	1591.38 1591.36 1591.34 1591.33 1591.33	1591.21 1591.20 1591.20 1591.20 1591.19	1591.12 1591.11 1591.12 1591.11 1591.13	1591.20 1591.20 1591.19 1591.20 1591.20	1592.43 1592.30 1592.25 1592.22 1592.17	1591.88 1591.88 1591.85 1591.85 1591.84	1592.04 1592.00 1591.96 1591.94 1592.11	1592.06 1592.26 1592.65 1592.89 1593.15	1592.35 1592.30 1592.25 1592.19 1592.16	1591.38 1591.36 1591.34 1591.31 1591.29	1591.03 1591.01 1591.00 1591.00
6 7 8 9 10	1591.12 1591.11 1591.11 1591.10 1591.10	1591.33 1591.31 1591.30 1591.30 1591.29	1591.19 1591.19 1591.18 1591.18 1591.18	1591.13 1591.13 1591.13 1591.13 1591.13	1591.21 1591.22 1591.23 1591.26 1591.16	1592.13 1592.10 1592.06 1592.03 1592.01	1591.85 1591.87 1591.88 1591.85 1591.85	1592.19 1592.97 1594.06 1593.86 1593.46	1593.18 1593.13 1593.84 1594.97 1595.41	1592.12 1592.07 1592.02 1591.98 1591.93	1591.27 1591.26 1591.24 1591.22 1591.21	1591.03 1591.02 1591.01 1591.00 1590.99
11 12 13 14 15	1591.10 1591.09 1591.09 1591.10 1591.10	1591.28 1591.29 1591.28 1591.27 1591.27	1591.16 1591.14 1591.07 1591.05 1591.19	1591.13 1591.13 1591.13 1591.13 1591.13	1591.24 1591.28 1591.32 1591.38 1591.44	1592.02 1592.01 1591.99 1591.96 1592.08	1591.86 1591.87 1591.86 1592.03 1592.20	1593.41 1593.42 1593.31 1593.11 1592.94	1596.12 1596.70 1596.20 1595.81 1595.43	1591.89 1591.85 1591.82 1591.78 1591.76	1591.20 1591.19 1591.18 1591.16 1591.17	1590.98 1590.97 1590.96 1590.96
16 17 18 19 20	1591.10 1591.10 1591.09 1591.08 1591.08	1591.26 1591.26 1591.25 1591.25 1591.25	1591.24 1591.13 1591.23 1591.20 1591.28	1591.15 1591.14 1591.14 1591.13 1591.11	1591.47 1591.46 1591.49 1591.50 1591.52	1592.25 1592.25 1592.22 1592.17 1592.13	1592.15 1592.08 1592.04 1592.00 1591.97	1592.76 1592.60 1592.50 1592.40 1592.34	1594.69 1594.19 1593.89 1593.67 1593.49	1591.74 1591.70 1591.66 1591.63 1591.59	1591.15 1591.17 1591.15 1591.14 1591.12	1591.04 1591.06 1591.26 1591.74 1592.84
21 22 23 24 25	1591.07 1591.10 1591.10 1591.20 1591.65	1591.25 1591.25 1591.23 1591.23 1591.24	1591.27 1591.11 1591.22 1591.20 1591.18	1591.12 1591.13 1591.13 1591.13	1591.54 1591.54 1591.56 1591.84 1592.12	1592.10 1592.09 1592.06 1592.02 1591.98	1591.94 1591.92 1591.91 1592.16 1592.77	1592.27 1592.19 1592.14 1592.09 1592.03	1593.32 1593.15 1593.01 1592.87 1592.76	1591.56 1591.53 1591.50 1591.48 1591.45	1591.10 1591.09 1591.08 1591.08 1591.06	1593.35 1593.79 1593.37 1592.91 1592.63
26 27 28 29 30 31	1591.62 1591.54 1591.49 1591.46 1591.43 1591.41	1591.23 1591.23 1591.23 1591.22 1591.22	1591.19 1591.18 1591.27 1591.23 1591.16 1591.13	1591.13 1591.12 1591.17 1591.16 1591.18 1591.19	1592.40 1592.75 1592.61 	1591.98 1591.98 1591.94 1591.94 1591.91 1591.89	1592.56 1592.37 1592.24 1592.15 1592.09	1591.99 1591.96 1591.93 1591.92 1592.00 1592.10	1592.67 1592.58 1592.52 1592.46 1592.41	1591.45 1591.44 1591.43 1591.46 1591.47 1591.42	1591.06 1591.05 1591.03 1591.02 1591.01 1591.04	1592.42 1592.26 1592.12 1592.03 1591.95
MEAN MAX MIN	1591.20 1591.65 1591.07	1591.28 1591.38 1591.22	1591.19 1591.28 1591.05	1591.13 1591.19 1591.11	1591.52 1592.75 1591.16	1592.09 1592.43 1591.89	1592.03 1592.77 1591.84	1592.52 1594.06 1591.92	1593.72 1596.70 1592.06	1591.77 1592.35 1591.42	1591.17 1591.38 1591.01	1591.66 1593.79 1590.96

SEDGWICK COUNTY

374956097231601. Local number 07144200

LOCATION.--Lat 37°49'56", long 97°23'16", Hydrologic Unit 11030012, County Code 173, Maize quadrangle, on right bank at downstream side of county highway bridge, 0.5 mi west of Valley Center, and at mile 15.6 from mouth. Owner: U.S. Geological Survey.

AQUIFER.--Equus Beds. Aquifer code: 112PLSC.

WELL CHARACTERISTICS.--Drilled, unused water-table well, diameter 2 in., depth 50.0 ft, screened 40.0-50.0 ft.

INSTRUMENTATION. -- Submersible transducer interfaced to a data-collection platform/data logger with a 1-hour update interval.

DATUM.--Datum of gage is sea level. Measuring point is top of casing, elevation 1,349.63 ft, top of casing is 2.00 ft above land-surface datum.

REMARKS.--Records good. Water level fluctuates with river stage.

PERIOD OF RECORD. -- October 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 1,334.68 ft above sea level, June 13, 1995; lowest, 1,327.59 ft above sea level, Oct. 2, 1994.

EXTREMES FOR CURRENT YEAR.--Highest water level, 1,332.46 ft, Mar. 18; lowest, 1,328.16 ft, Sept. 15.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1328.37	1329.86 1329.71	1328.65 1328.63 1328.63 1328.62 1328.62				1329.86 1329.81 1329.76 1329.72 1329.72	1329.18 1329.15 1329.15	1329.47 e1330.20 e1331.08 1330.45 1329.90	1329.52 1329.44	1328.37 1328.35 1328.32 1328.29 1328.29	1328.28 1328.23 1328.23 1328.22 1328.21
6 7 8 9 10	1328.35	1329.12	1328.62 1328.63 1328.61 1328.62 1328.60		1328.52	1330.03 1329.93	1329.67 1329.64 1329.63 1329.58 1329.56	1329.23 1329.50 1329.35 1329.26 1329.18	1331.32 1331.08 1332.19	e1329.32 e1329.26 e1329.20 e1329.14 e1329.08	1328.29 1328.27 1328.28 1328.27 1328.26	1328.22 1328.22 1328.22 1328.22 1328.20
11 12 13 14 15		1328.93	1328.59 1328.63 1328.60 1328.60 1328.61	1328.48 1328.49 1328.50 1328.49 1328.48	1328.72 1328.70 1328.85 1329.74 1329.84	1329.80 1329.76 1331.13 1331.45 1331.46	1329.87 1330.09 1330.11 1329.87 1329.80	1329.14 1329.10 1329.06 1329.04 1329.01	1331.91 1331.29 1330.71	1328.91 1328.88	1328.26 1328.26 1328.25 1328.24 1328.23	1328.19
16 17 18 19 20	1328.40	1328.83 1328.81 1328.79 1328.78 1328.77	1328.55	1328.46 1328.47 1328.46 1328.45 1328.41	1329.61 1329.45 1329.41 1329.30 1329.18	1332.38 1332.44 1332.45 1332.31 1331.63	1329.82 1329.77 1329.65 1329.58 1329.51	1328.98 1328.97 1328.96 1328.95 1328.95	1329.95 1329.92	1328.81 e1328.78 1328.76 1328.71 1328.66	1328.27 1328.28 1328.27	
21 22 23 24 25	1328.42		1328.56 1328.59 1328.57 1328.54 1328.51	1328.42 1328.41	1329.16 1329.30 1329.35 1331.05 1331.65	1331.22 1330.90 1330.68 1330.47 1330.33	1329.47 1329.44 1329.38 1329.35 1329.33	1328.95 1329.08 1329.00 1328.94 1328.91	1332.17 1332.26	1328.53		1330.84 1330.12 1329.64 1329.40 1329.23
26 27 28 29 30 31	1329.90	1328.70 1328.69 1328.67	1328.52	1328.43 1328.45 1328.51	1331.69 1331.61 	1330.14 1330.08 1330.01	1329.33 1329.31 1329.27 1329.24 1329.21	1328.90 1328.89 1328.88 1328.89 1329.05 1329.14		1328.44 1328.49 1328.48 1328.44	1328.23 1328.22 1328.25 1328.24 1328.22 1328.24	1329.04 1328.96 1328.90
MEAN MAX MIN	1330.95	1328.99 1329.86 1328.67	1328.65	1328.57	1329.44 1331.69 1328.52	1332.45		1329.50	1332.26	1328.88 1329.68 1328.39	1328.26 1328.37 1328.21	1330.95

SEDGWICK COUNTY

375259097252901. Local number EB-142

LOCATION.-- Lat 37°52'59", long 97°25'29", Hydrologic Unit 11030012, County Code 173, Sedgwick quadrangle, at the downstream side of the county bridge, 2.0 mi south of Sedgwick, 4.1 mi downstream from Sand Creek. Owner: U.S. Geological Survey.

AQUIFER.--Equus Beds. Aquifer code: 112PLSC.

WELL CHARACTERISTICS .-- Drilled unused water-table well, diameter 2 in., depth 48.5 ft, screened 38.5-48.5 ft.

INSTRUMENTATION.--Submersible transducer interfaced to a data collection platform/data logger with a 1-hour update interval.

DATUM.-- Datum of gage is sea level. Measuring point is top of PVC casing, elevation 1370.34 ft, top of casing is 1.5 ft above land surface.

REMARKS.--Water level flucuates with river stage and nearby pumping.

PERIOD OF RECORD. -- November 1993 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1,359.52 ft above sea level, Nov. 4, 1998; lowest, 1,344.93 ft above sea level, Mar. 7, 1995.

EXTREMES FOR CURRENT YEAR.--Highest water level, 1,351.15 ft, June 9; lowest, 1,345.37 ft, Sept. 15.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1345.73 1345.72 1345.72 1345.71 1345.70	1346.85	1346.07 1346.06 1346.06 1346.04 1346.05	1345.86 1345.85 1345.87 1345.86 1345.84	1345.86 1345.83	1348.04	1347.81 1347.76 e1347.70 1347.64 1347.62	1347.03 1347.00 1346.96 1346.98	1346.90 1346.97 1347.11 1347.29 1347.22	1347.76 1347.68	1346.31 1346.26 1346.21 1346.18 1346.16	1345.54 1345.52 1345.51 1345.50 1345.47
6 7 8 9 10	1345.70 1345.69 1345.69 1345.69 1345.69	1346.56 1346.51	1346.04 1346.05 1346.02 1346.04 1346.02	1345.84	1345.82 1345.83 1345.81 1345.86 1345.87	1347.77 1347.69 1347.62 1347.55 1347.50		1346.99 1347.05 1347.01 1346.98 1346.94	1348.70 1348.62 1351.13	1347.52 1347.45 1347.38 1347.32 1347.26	1346.11 1346.08 1346.05 1346.01 1345.97	
11 12 13 14 15	1345.69 1345.68 1345.68 1345.69 1345.68	1346.42 1346.37 1346.33 1346.31 1346.33	1346.01	1345.84 1345.84 1345.87 1345.83 1345.82	1345.88	1347.44 e1347.41 1348.00 1348.16 1348.33	1347.61 1347.64 1347.66 1347.58 1347.51	1346.91 1346.86 1346.86 1346.84 1346.82	1350.68 1350.25 1349.55 1349.14 1348.82		1345.93 1345.92 1345.89 1345.87 1345.83	
16 17 18 19 20	1345.69 1345.70 1345.69 1345.69 1345.68	1346.22	1345.97	1345.82 1345.82 1345.82 1345.80 1345.80		1349.59 1349.77 1349.91 1349.50 1349.11	1347.49 1347.46 1347.43 1347.41 1347.35	1346.79 1346.77 1346.76 1346.74 1346.74	1348.45 1348.36 1348.28	1346.93 e1346.91 1346.85 1346.81 1346.76	1345.80 1345.80 1345.78 1345.76 1345.74	1347.73
21 22 23 24 25	1345.68 1345.67 1345.69 1345.71 1345.91	1346.17 1346.16	1345.93 1345.94 1345.91 1345.91 1345.90	1345.79	1346.18 1346.25 1346.30 1347.50 1349.12	1348.86 1348.66 1348.51 1348.35 1348.24	1347.31 1347.28 1347.23 1347.20 1347.16	1346.71 1346.78 1346.73 1346.69 1346.67	1348.41 1349.57 1349.97 1350.01 1349.24	1346.63 1346.59	1345.72 1345.69 1345.61 1345.61 1345.60	1346.97
26 27 28 29 30 31	1346.93	1346.13 1346.12 1346.09	1345.90 1345.89 1345.88 1345.87	1345.77 1345.77 1345.79 1345.84 1345.82 1345.81		1348.15 1348.09 1348.04 1347.96 1347.91 1347.84	1347.07 1347.05	1346.66 1346.65 1346.62 1346.62 1346.67 1346.71	1348.59 1348.40 1348.24	1346.50 1346.49 1346.48 1346.46 1346.42 1346.36	1345.59 1345.57 1345.57 1345.56 1345.53 1345.54	1346.48 1346.40 1346.33
MEAN MAX MIN	1345.97 1347.40 1345.67		1345.97 1346.07 1345.87		1346.52 1349.23 1345.81	1348.27 1349.91 1347.41			1348.79 1351.13 1346.90	1347.01 1347.97 1346.36	1345.85 1346.31 1345.53	1347.76

SEDGWICK COUNTY

375300097253301. Local number EB-142-A2

LOCATION.-- Lat 37°53'00", long 97°25'33", Hydrologic Unit 11030012, County Code 173, Sedgwick quadrangle, at the right upstream side of the county bridge in the streambed, 2.0 mi south of Sedgwick, 4.1 mi downstream from Sand Creek. Owner: Ground-Water Management District #2.

AQUIFER.--Equus Beds. Aquifer code: 112PLSC.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2 in., depth 42.50 ft, screened 32.1-42.5 ft.

INSTRUMENTATION. -- Submersible transducer interfaced to a data-collection platform/data logger with a 1-hour update interval.

DATUM.-- Datum of gage is sea level. Measuring point is top of PVC casing, elevation 1,355.15 ft, top of casing is 2.03 ft above land surface.

REMARKS.--Water level fluctuates with river stage and nearby pumping.

PERIOD OF RECORD. -- January 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1,364.21 ft above sea level, Nov. 3, 1998; lowest, 1,345.04 ft above sea level, Aug. 9, 1996.

EXTREMES FOR CURRENT YEAR.--Highest water level, 1,351.50 ft, June 10; lowest, 1,345.85 ft, Sept. 15.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1346.20 1346.21 1346.20 1346.18 1346.18	1347.09 1347.11 1347.22 1347.14 1347.05	1346.49 1346.48 1346.48 1346.47	1346.29 1346.29 1346.30 1346.30	1346.28 1346.30 1346.27	e1348.60 e1348.35 e1348.30 e1348.20 e1348.10	1348.13 1348.10 1348.06 1348.02 1348.01	1347.50 1347.49 1347.46 1347.46 1347.48	1347.48 1347.54 1347.70 1347.87 1347.74	1348.31 1348.21 1348.10 1348.06 1347.98	1346.77 1346.72 1346.66 1346.63 1346.63	1346.08 1346.06 1346.04 1346.03 1346.01
6 7 8 9	1346.17 1346.16 1346.16 1346.16 1346.17	1346.97 1346.88 1346.84 1346.81 1346.77	1346.47 1346.48	1346.31 1346.29 1346.29 1346.29 1346.29	1346.25 1346.27 1346.25 1346.31	e1348.05 e1347.95 e1347.90 e1347.85 e1347.80	1347.98 1347.94 1347.93 1347.84 1347.88	1347.50 1347.57 1347.51 1347.48	1348.96 1349.26 1349.12 1349.97 e1351.50	1347.90 1347.85 1347.78 1347.73 1347.67	1346.57 1346.54 1346.51 1346.47 1346.43	1346.01 1346.00 1345.99 1345.97
11 12 13 14 15	1346.16 1346.15 1346.14 1346.16 1346.15	1346.76 1346.75 1346.71 1346.69 1346.71	1346.42 1346.44 1346.44 1346.41 1346.44	1346.29 1346.29 1346.31 1346.28 1346.27	1346.31 1346.37 1346.70	e1347.78 e1347.75 e1348.25 e1348.40 e1348.60	1348.05 1348.07 1348.09 1347.98 1347.93	1347.40 1347.32 1347.36 1347.34 1347.33	1351.07 1350.44 1349.66 1349.28 1348.96	1347.61 1347.55 1347.49 1347.44 1347.43	1346.40 1346.40 1346.37 1346.35 1346.31	1345.90 1345.95 1345.93 1345.93 1345.92
16 17 18 19 20	1346.16 1346.17 1346.16 1346.15 1346.15	1346.63	1346.39 1346.42 1346.38 1346.40 1346.40	1346.26 1346.27 1346.27 1346.24 1346.24	1346.69 1346.68 1346.65	e1350.21 e1350.17 e1350.22 e1349.65 e1349.25	1347.91 1347.88 1347.85 e1347.80 e1347.75	1347.29 1347.28 1347.27 1347.25 1347.26	1348.82 1348.67 1348.64 1348.60 1348.54	1347.40 1347.38 1347.30 1347.26 1347.21	1346.28 1346.26	1345.91 1345.91 e1347.60 e1348.90 1348.49
21 22 23 24 25	1346.14 1346.13 1346.15 1346.17 1346.39	1346.61 1346.59 1346.58 1346.57 1346.56	1346.36 1346.38 1346.35 1346.34 1346.33	1346.22		e1348.65	1347.70 1347.69 1347.63 1347.60 1347.53	1347.24 1347.33 1347.25 1347.21 1347.19	1348.90 1350.39 1350.67 1350.51 1349.41	1347.17 1347.11 1347.10 1347.05 1347.00	1346.20 1346.18 1346.17 1346.16 1346.16	1348.15 1347.51 1347.23 1347.07 1346.96
26 27 28 29 30 31	e1347.09 1347.79 1347.30 1347.05 1347.12 1346.99	1346.56 1346.54 1346.54 1346.51 1346.53	1346.32 1346.33 1346.32 1346.31 1346.31 1346.30	1346.21	e1349.63 e1349.54 e1349.00 	1348.39 1348.34 1348.31 1348.26 1348.22 1348.16	1347.58 1347.57 1347.55 1347.52 1347.52	1347.18 1347.17 1347.15 1347.15 1347.23 1347.28	1349.03 1348.81 1348.66 1348.52 1348.42	1346.99 1347.01 1347.00 1346.98 1346.92 1346.87	1346.14 1346.13 1346.13 1346.12 1346.03 1346.08	1346.87 1346.80 1346.72 1346.66 1346.62
MEAN MAX MIN	1346.38 1347.79 1346.13	1346.74 1347.22 1346.51	1346.40 1346.49 1346.30	1346.27 1346.31 1346.21	1346.94 1349.89 1346.25	1348.54 1350.22 1347.75	1347.84 1348.13 1347.52	1347.33 1347.57 1347.15	1349.10 1351.50 1347.48	1347.45 1348.31 1346.87	1346.34 1346.77 1346.03	

SEDGWICK COUNTY

 $375300097253501.\ Local number EB-142-A3$

LOCATION.-- Lat 37°53'00", long 97°25'35", Hydrologic Unit 11030012, County Code 173, Sedgwick quadrangle, at the right upstream side of the county bridge west of the stream, 2.0 mi south of Sedgwick, 4.1 mi downstream from Sand Creek. Owner: Ground-Water Management District #2.

AQUIFER.--Equus Beds. Aquifer code: 112PLSC.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2 in., depth 48.30 ft, screened 38.3-48.3 ft.

INSTRUMENTATION. -- Submersible transducer interfaced to a data-collection platform/data logger with a 1-hour update interval.

DATUM.-- Datum of gage is sea level. Measuring point is top of PVC casing, elevation 1,363.63 ft, top of casing is 2.03 ft above land surface.

REMARKS.--Water level fluctuates with river stage and nearby pumping.

PERIOD OF RECORD. -- January 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1,364.21 ft above sea level, Nov. 3, 1998; lowest, 1,345.13 ft above sea level, Aug. 9, 1996.

EXTREMES FOR CURRENT YEAR.--Highest water level, 1,351.84 ft, June 9; lowest, 1,346.15 ft, Sept. 15.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1 2 3 4 5	1346.55 1346.56 1346.56 1346.54 1346.53	1347.37 1347.38 1347.47 1347.41 1347.35	1346.83 1346.82 1346.83 1346.80 1346.81	1346.61 1346.61 1346.63 1346.62 1346.61		1348.67 1348.47 1348.38 e1348.31 1348.26	1348.47 1348.44 1348.40 1348.36 1348.35	1347.87 1347.85 1347.81 1347.82 1347.83	1347.77 1347.82 1347.96 1348.10 1348.01			1346.44 1346.42 1346.41 1346.39 1346.37
6 7 8 9 10	1346.51 1346.51 1346.50 1346.51 1346.51	1347.18 1347.14		1346.62 1346.59 1346.60 1346.59 1346.60	1346.55 1346.57 1346.55 1346.59 1346.60	1348.22 1348.16 1348.11 1348.07 1348.04	1348.34 1348.30 1348.29 1348.19 1348.25	1347.84 1347.90 1347.85 1347.81 1347.79	1350.20 1349.28 1349.19 1351.83 1351.23	1348.23 1348.18 1348.13 1348.06 1348.01		1346.37 1346.36 1346.35 1346.33 1346.23
11 12 13 14 15	1346.50 1346.49 1346.48 1346.49 1346.48			1346.60 1346.60 1346.62 1346.58 1346.58	1346.60 1346.65	1348.00 e1347.99 1348.59 1348.70 1348.87	1348.38 1348.33 1348.41 1348.32 1348.27	1347.75 1347.63 1347.71 1347.69 1347.68	1350.90 1350.43 1349.82 1349.51 1349.17	1347.95 1347.88 1347.84 1347.78 1347.78	1346.76 1346.78 1346.75 1346.72 1346.67	1346.21 1346.30 1346.29 1346.28 1346.27
16 17 18 19 20	1346.49 1346.50 1346.49 1346.49	1346.99 1346.98 1346.98 1346.96 1346.94	1346.72 1346.76 1346.71 1346.74 1346.72	1346.58	1346.96 1346.93 1346.92 1346.90 1346.85	1350.21 1350.17 1350.22 1349.72 1349.38	1348.25 1348.23 1348.20 1348.19 1348.14	1347.62 1347.62 1347.60 1347.60	1349.10 1348.96 1348.93 1348.90 1348.84	1347.61	1346.64	1347.45
21 22 23 24 25	1346.47 1346.47 1346.47 1346.50 1346.69	1346.92	1346.67		1346.85 1346.92 1346.97 1348.33 1349.89	1349.19 1349.05 1348.94 1348.82 1348.76	1348.09 1348.09 1348.03 1348.00 1347.89	1347.59	1349.10 1350.27 1350.53 1350.43 1349.56	1347.43	1346.56 1346.54 1346.53 1346.52 1346.51	1347.45
26 27 28 29 30 31	1348.27 1347.87 1347.59 1347.47 1347.47	1346.90 1346.89 1346.88 1346.85 1346.87		1346.52 1346.52 1346.55 1346.59 1346.57 1346.55	1349.63 1349.54 1349.07 	1348.70 1348.65 1348.63 1348.58 1348.54 1348.48	1347.97 1347.95 1347.92 1347.89 1347.88	1347.52 1347.51 1347.49 1347.49 1347.55 1347.60	1349.27 1349.07 1348.94 1348.82 1348.74	1347.32 1347.25	1346.48 1346.48	1347.15 1347.09 1347.03 1346.97 1346.93
MEAN MAX MIN	1346.74 1348.27 1346.47	1347.07 1347.47 1346.85	1346.74 1346.83 1346.62		1347.19 1349.89 1346.55	1348.74 1350.22 1347.99	1348.19 1348.47 1347.88	1347.67 1347.90 1347.49	1349.36 1351.83 1347.77		1346.71 1347.16 1346.35	1346.83 1348.61 1346.21

KANSAS RIVER BASIN

$384021100545400 \quad \text{SCOTT LAKE STATE PARK, KS} \\ \text{(National Atmospheric Deposition Program/National Trends Network station)}$

LOCATION.--Lat $38^{\circ}40^{\circ}21^{\circ}$, long $100^{\circ}54^{\circ}54^{\circ}$, in SW $^{1}/_{4}$ SW $^{1}/_{4}$ SE $^{1}/_{4}$ sec.12, T.16 S., R.33 W., Scott County, Hydrologic Unit 10260004, 14 mi north of Scott City, and 1 mi south of Scott Lake.

PERIOD OF RECORD. -- March 1984 to current year.

 $INSTRUMENTATION.-- The \ sample \ collector \ is \ an \ Aerochem \ Metrics \ Wet/Dry \ Precipitation \ Collector \ and \ a \ recording \ rain \ gage \ (with \ event \ recorder).$

REMARKS.--Chemical analyses of rainfall collected in wet-dry automatic sampler. Data collected in cooperation with Kansas Department of Wildlife and Parks. Chemical analyses from National Atmospheric Deposition Program, National Trends Network Analytical Laboratory. If a sufficient volume of sample is collected, specific conductance and pH are measured in the field before the composite sample is sent in for analysis.

DATE	PRECIP- ITATION TOTAL INCHES/ WEEK (00046)	SAMPLE SIZE (ML) (32002)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT 03-10	.17	290	27	24	5.1	6.3	3.66	1.33	.083	.1	5.95	.025	.09
OCT 17-24	.65	950	4	4	5.5	5.9	.052	.02	.003	M	26.2	.019	.01
OCT 24-31	2.87	4500	5	4	5.2	5.5	.132	.03	.012	.1	56.3	.101	.01
OCT 31-				5									
NOV 07 NOV	.40	640	29		5.7	6.3	.418	.15	.010	М	6.04	.009	.02
07-14 DEC 19 2000-		1100	12	11	4.6	4.8	.154	.06	.004	M	22.5	.023	M
JAN 02 2001 JAN	.20	180	5	6	5.2	5.4	.234	.09	.004	М	18.3	.023	.01
09-16 JAN	.12	100	8	7	5.3	5.4	.264	.10	.006	М	11.2	.014	.01
16-23 JAN	.10	120	6	5	5.0	5.3	.124	.04	.004	М	8.95	.007	.01
23-30 FEB		890	3	3	5.3	5.4	.075	.03	.003	М		.010	<.003
06-13 FEB		260	13	12	6.5	5.5	1.22	.44	.027	.2	25.4	.077	.03
20-27 FEB 27-	.22	260	18	18	5.4	6.3	2.49	.90	.059	.1	9.93	.036	.06
MAR 06 MAR	.04	29		6		5.5	.257	.08	.014	M	10.1	.012	.01
06-13 MAR	.25	380	18	17	5.3	5.9	.480	.17	.011	M	9.06	.014	.02
13-20 MAR	.09	83	14	12	5.0	5.3	.496	.18	.013	М	8.19	.013	.01
20-27	.21	400	18	17	5.8	6.6	.878	.32	.018	M	3.89	.008	.03
MAR 27- APR 03		200	16	16	6.0	6.7	.649	.23	.018	М	7.37	.014	.03
APR 03-10	.45	680	27	28	6.6	7.2	10.1	3.79	.146	.3	5.41	.037	.22
APR 10-17	1.46	2500	18	19	6.8	7.0	4.75	1.75	.092	.3	11.4	.057	.09
APR 17-24	.25	420	26	28	6.2	6.8	7.76	2.75	.217	.6	12.9	.087	.29
MAY 01-08	2.04	3500	10	5	5.5	6.4	.364	.13	.012	М	10.7	.015	.01
MAY 15-22	1.03	1300	6	6	5.7	6.2	.320	.11	.011	М	9.97	.013	.01
MAY 22-29	.60	960	13	12	5.7	6.6	1.49	.53	.038	М	4.18	.011	.09
MAY 29- JUN 05	1.28	2100	8	8	7.8	6.2	1.02	.36	.029	.1	13.0	.032	.04
JUN 05-12	.02	23		17		5.6	1.29	.45	.039	.1	15.4	.043	.05
JUN 26- JUL 03	.11	180	12	11	5.4	6.0	.990	.35	.027	М	6.47	.014	.04
JUL 10-17	.37	630	15	15	5.6	6.3	2.51	.92	.052	.1	4.95	.017	.10
JUL 17-24	2.18	3700	12	12	5.5	6.4	1.49	.54	.034	.1	6.41	.018	.08
JUL 24-31	4.09	5300	16	14	5.8	6.4	1.80	.67	.034		5.72	.017	.08
AUG										.1			
07-14 AUG	.05	81	23	24	5.7	6.6	3.87	1.40	.090	M	2.49	.011	.17
14-21 AUG	1.95	3300	10	9	5.8	6.4	.707	. 25	.020	М	5.15	.010	.04
21-28 AUG 28-	.34	570	17	18	6.0	6.7	2.59	.95	.055	М	3.07	.011	.12
SEP 04 SEP	.42	750	12	12		6.2	1.08	.39	.024	М	4.98	.011	.03
04-11 SEP	.20	320	13	10		5.7	1.37	. 48	.039	М	5.40	.014	.07
11-18 SEP		1100	30	8	5.8	6.0	.414	.15	.012	M	8.38	.013	.03
18-25	.10	140	18	17	6.7	6.6	2.77	.98	.075	M	2.79	.010	.15

KANSAS RIVER BASIN

384021100545400 SCOTT LAKE STATE PARK, KS--Continued (National Atmospheric Deposition Program/National Trends Network station)

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	PHOS- PHATE, DIS- SOLVED (MG/L AS PO4) (00653)
OCT 03-10	2.7	.1	4.65	1.50	<.003
OCT 17-24	.3	<.03	.488	. 29	<.003
OCT 24-31	. 4	.1	.394	.23	<.003
OCT 31- NOV 07	.5	<.03	.705	.49	<.003
NOV 07-14	.9	М	1.21	.32	<.003
DEC 19 2000- JAN 02 2001	.2	М	1.27	. 29	<.003
JAN 09-16	.3	М	1.82	. 47	<.003
JAN 16-23	.2	М	.973	.22	<.003
JAN 23-30	.1	<.03	.267	.08	<.003
FEB 06-13	2.1	.1	1.10	.53	<.003
FEB 20-27	2.4	.1	3.00	1.18	<.003
FEB 27- MAR 06	.6	<.1	.726	.41	<.01
MAR 06-13	2.2	М	2.59	1.66	<.003
MAR 13-20	1.1	.1	2.46	.85	<.003
MAR 20-27	1.3	M	2.62	1.77	<.003
MAR 27- APR 03	1.2	M	2.48	1.74	<.003
APR 03-10	1.5	.1	.681	.26	<.003
APR 10-17	1.6	.2	.996	.81	.01
APR 17-24	3.0	.7	1.01	.91	<.003
MAY 01-08	. 4	М	.715	.44	<.003
MAY 15-22	. 4	М	.791	.52	<.01
MAY 22-29 MAY 29-	.9	.1	1.52	1.04	<.01
JUN 05	.9	.1	1.07	.56	<.01
JUN 05-12 JUN 26-	1.1	.3	2.40	1.16	<.04
JUL 03 JUL	.9	.1	2.46	.86	<.01
10-17 JUL	1.0	.1	2.75	.99	<.01
17-24 JUL	.8	.1	1.94	.88	<.01
24-31 AUG	1.4	.1	2.24	1.02	<.01
07-14 AUG	1.9	.2	3.64	1.49	<.01
14-21 AUG	.7	М	1.17	.81	<.01
21-28 AUG 28-	.9	.1	2.56	1.34	<.01
SEP 04 SEP	1.2	.1	2.11	1.05	<.01
04-11 SEP	1.0	.1	1.80	.52	<.01
11-18 SEP	.6	M	1.03	.59	<.01
18-25	1.2	.1	3.17	1.15	<.01

M Presence of material verified but not quantified.

OSAGE RIVER BASIN

373903094481300 FARLINGTON STATE FISH HATCHERY, KS (National Atmospheric Deposition Program/National Trends Network station)

LOCATION.--Lat $37^\circ39^\circ03^\circ$, long $94^\circ48^\circ13^\circ$, in NW $^1/_4$ NW $^1/_4$ SE $^1/_4$ sec.32, T.27 S., R.24 E., Crawford County, Hydrologic Unit 10290104, 3 mi northwest of Farlington, and 0.5 mi northwest of Farlington Lake.

PERIOD OF RECORD. -- March 1984 to current year.

INSTRUMENTATION.--The sample collector is an Aerochem Metrics Wet/Dry Precipitation Collector and a recording rain gage (with event recorder).

REMARKS.--Chemical analyses of rainfall collected in wet-dry automatic sampler. Data collected in cooperation with Kansas Department of Wildlife and Parks Chemical analyses from National Atmospheric Deposition Program, National Trends Network Analytical Laboratory. If a sufficient volume of sample is collected, specific conductance and pH are measured in the field before the composite sample is sent in for analysis.

DATE	PRECIP- ITATION TOTAL INCHES/ WEEK (00046)	SAMPLE SIZE (ML) (32002)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
OCT 03-10	.07	100	29	27	4.3	4.5	1.42	.52	.030	.1	10.6	.029	.02
OCT 10-17	3.31	5600	6	5	5.2	5.2	.143	.05	.005	М	25.4	.026	М
OCT 17-24	.26	420	25	24	4.3	4.4	.286	.09	.013	.1	30.4	.050	.01
OCT 24-31	.14	290	20	20	4.5	4.5	.472	.13	.034	.2	51.2	.155	.03
OCT 31- NOV 07	.96	1600	3	3	5.2	5.3	.110	.04	.003	М	24.6	.022	М
NOV 07-14	1.08	710	5	4	5.0	5.1	.135	.05	.003	М	11.2	.009	M
NOV 21-28	.12	94	35	33	4.2	4.3	.770	.29	.013	М	4.26	.008	.01
DEC 05-12	.10	170	15	14	5.8	5.9	1.99	.73	.037	M	2.33	.007	.01
DEC 12-19 DEC	1.03	1700	3	3	5.3	5.5	.280	.10	.005	M	8.42	.010	M
19-26 DEC 26 2000-		190	6	5	4.4	5.3	.914	.33	.023	M	4.93	.010	.01
JAN 02 2001 JAN	.04	62		6		5.1	.162	.06	.006	М	10.4	.010	.01
09-16 JAN	.24	350	11	8	4.7	5.0	.239	.09	.006	М	13.8	.016	M
16-23 JAN	.03	39		20		6.2	4.06	1.55	.044	.1	4.76	.020	.03
23-30 FEB		4700	9	11	5.3	6.1	.516	.15	.032	.1	11.1	.030	.28
05-13 FEB		3000	13	11	4.6	4.8	.344	.10	.021	.2	47.3	.112	.02
13-20 FEB		530	18	14	4.5	4.9	.648	.23	.016	M	12.5	.025	.04
20-27 FEB 27-	1.82	3400	10	9	5.1	5.9	.896	.29	.041	.1	14.4	.041	.20
MAR 06 MAR	.03	37		26		4.5	1.17	.40	.044	.1	14.6	.038	.02
06-13 MAR	.42	750	12	9	4.8	5.4	.545	.19	.017	M	12.3	.022	.02
13-20 MAR	1.50	2600	6	5	5.5	5.2	.216	.07	.007	M	11.3	.012	M
20-27 MAR 27-	.02	17		16		6.0							
APR 03 APR	.94	1600	16	12	4.7	5.2	.638	.22	.022	.1	28.0	.065	.03
10-17 APR	1.46	2400	10	10	5.5	5.8	1.08	.37	.037	.2	26.5	.080	.05
17-24 MAY	.72	1200	14	14	6.1	6.4	2.85	.97	.106	.5	25.4	.120	.09
01-08 MAY	.47	760	11	11	5.3	5.4	.971	.32	.043	.2	29.7	.088	.04
08-15 MAY	.36	600	14	14	5.5	5.4	1.29	.42	.058	.3	32.1	.111	.03
15-22 MAY	1.35	2300	8	8	5.1	5.1	.483	.17	.013	М	14.6	.025	.02
22-29 MAY 29-	.07	100	23	22	6.1	7.0	5.90	2.22	.087	М	1.33	.007	.05
JUN 05 JUN	3.39	5900	8	8	5.2	5.3	.703	.25	.021	.1	22.5	.050	.02
05-12 JUN	.30	520	18	19	4.7	4.7	1.51	.53	.045	.2	21.8	.070	.03
12-19 JUN	.76	1300	12	12	5.1	5.1	1.31	.46	.041	.2	24.6	.078	.04
19-26 JUN 26-	1.96	3300	19	20	4.5	4.5	.758	.27	.019	M	10.9	.022	.02
JUL 03 JUL	.03	42		35		7.0	10.2	3.89	.120	.1	1.78	.012	.25
03-10 JUL	.12	210	19	19	5.5	6.6	4.43	1.62	.095	.1	4.72	.022	.18
10-17	1.24	2100	11	11	5.0	5.1	.955	.34	.025	.1	17.4	.046	.09

CHEMICAL QUALITY OF PRECIPITATION

OSAGE RIVER BASIN

373903094481300 FARLINGTON STATE FISH HATCHERY, KS--Continued (National Atmospheric Deposition Program/National Trends Network station)

MIIIIN QUILLII D	, ,,		TODER EGO	0 10 0211	
DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	DIS- SOLVED (MG/L	GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	PHOS- PHATE, DIS- SOLVED (MG/L AS PO4) (00653)
OCT					
03-10 OCT	3.0	.2	2.90	.60	<.003
10-17 OCT	.5	M	.445	.19	<.003
17-24 OCT	2.1	.2	1.78	.37	<.003
24-31 OCT 31-	1.8	.4	1.68	.37	<.003
NOV 07 NOV	.3	M	.221	.06	<.003
07-14 NOV	.4	<.03	.199	.04	<.003
21-28 DEC	1.3	.1	5.30	.72	<.003
05-12	1.0	M	3.81	.85	<.003
12-19	.2	M	.372	.05	<.003
DEC 19-26	.4	М	1.03	.06	<.003
DEC 26 2000- JAN 02 2001	.3	<.03	.760	.04	<.003
JAN 09-16	.9	М	.766	.28	<.003
JAN 16-23	2.8	.2	3.48	.95	<.01
JAN 23-30	.9	.1	.727	.70	.42
FEB 05-13	1.1	.2	.719	.23	<.003
FEB 13-20	1.4	.1	1.81	.57	<.003
FEB 20-27	1.3	.1	.793	.53	.20
FEB 27- MAR 06	3.1	.2	2.52	.64	<.01
MAR 06-13	1.3	.1	.948	.51	<.003
MAR 13-20	.5	<.03	.529	.18	<.003
MAR 20-27					
MAR 27- APR 03	1.8	.1	1.24	.64	<.003
APR 10-17	1.5	.2	1.13	.54	<.003
APR 17-24	1.9	.6	.983	.41	<.003
MAY 01-08	1.5	.3	1.37	.56	<.003
MAY 08-15	2.0	.3	2.04	.78	<.01
MAY 15-22	.7	.1	1.02	.21	<.01
MAY 22-29	1.6	.1	2.61	.99	<.01
MAY 29- JUN 05	.8	.1	.948	.27	<.01
JUN 05-12	2.0	.3	2.31	.48	<.01
JUN 12-19	1.7	.3	1.24	.39	<.01
JUN 19-26	1.8	.1	1.49	.30	<.01
JUN 26- JUL 03	4.4	.3	4.77	.48	<.04
JUL 03-10	1.4	. 2	3.74	.84	<.01
JUL 10-17	1.3	.1	1.47	.38	<.01

CHEMICAL QUALITY OF PRECIPITATION

OSAGE RIVER BASIN

373903094481300 FARLINGTON STATE FISH HATCHERY, KS--Continued (National Atmospheric Deposition Program/National Trends Network station)

DATE	PRECIP- ITATION TOTAL INCHES/ WEEK (00046)	SAMPLE SIZE (ML) (32002)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM) (90095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	PH WATER WHOLE LAB (STAND- ARD UNITS) (00403)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
JUL 24-31	4.88	8200	13	13	4.7	4.7	.500	.18	.011	М	9.99	.016	.01
AUG 14-21	1.10	1800	15	16	5.7	6.3	4.21	1.56	.076	М	2.44	.010	.04
AUG 21-28	.52	920	16	16	5.2	5.6	2.58	.94	.058	. 2	15.4	.060	.04
AUG 28- SEP 04	.91	1500	8	8	5.1	5.1	.839	.31	.015	М	2.74	.005	.01
SEP 04-11	1.18	1900	11	11	5.1	5.1	1.21	.43	.031	.1	12.1	.031	.03
SEP 11-18	2.14	3700	14	14	4.7	4.7	.587	.21	.017	.1	19.3	.037	.01
SEP 18-25	.13	180	20	20	4.7	4.8	1.46	.53	.031	M	4.20	.011	.03
			DA	ATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	PHOS- PHATE, DIS- SOLVED (MG/L AS PO4) (00653)				
			AUG	24-31 3	1.1	.1	1.18	.27	<.01				
			AUG		1.7	.1	2.19	.59	<.01				
				21-28 3 28-	1.9	.3	3.15	.68	<.01				
			SEF SEF	04	1.0	M	1.00	.23	<.01				
				04-11	1.4	.1	1.38	.33	<.01				
				11-18	1.4	.1	1.24	.29	<.01				
				18-25	1.8	.1	3.79	.91	<.01				

M Presence of material verified but not quantified.

Α		miscellaneous surface-water	
Abilana Mud Craak at	404	stations in	484
Abilene, Mud Creek atAccess to USGS water data	481 27	surface-water station in	56-57
Achilles, South Fork Sappa Creek near	58-59,484	Biochemical oxygen demand, definition of	29
Acid neutralizing capacity,		Biomass, definition of	29
definition of	28	Biomass pigment ratio, definition of	29
Acre-foot, definition of	28	Black Vermillion River near Frankfort	
Ada, Salt Creek near	155-156,490 28	surface-water record	175-176
Adenosine triphosphate, definition of Albert, Walnut Creek at	342-344,488	water-quality record Blue-green algae, definition of	177,491 29
Alexander, Walnut Creek near	334-335,497	Blue River Basin,	29
Algal growth potential, definition of	28	miscellaneous surface-water	
Alkalinity, definition of	28	stations in	493
Alta Mills, Little Arkansas River at	367-368,499	surface-water stations in	261-264
Altoona, Verdigris River nearAmericus, Neosho River near	441-442,502 460-461,503	Blue River near Stanley Bottom material, definition of	261-262,493 29
Annual runoff, definition of	28	Bow Creek near Stockton	131-132,488
Annual 7-day minimum, definition of	28	Buckner Creek near Burdett	324-325,497
Arkansas City, Arkansas River at	425-427,501	Bunker Hill, Smoky Hill River near	105-106,487
Arkansas River, at Arkansas City	405 400	Burdett, Buckner Creek near	324-325,497
surface-water record water-quality record	425-426 427,501	Pawnee River near	322-323,497
at Deerfield	314-315,496	Burlingame, Dragoon Creek nearBurlington, Neosho River at	271-273,494 470-471,504
at Derby	395-396,500	Burr Oak. White Rock Creek near	79-80.485
at Dodge City	318-319,496	Buttermilk Creek near Willis	479
at Garden City	316-317,496		
at Great Bend	330-331,497	C	
at Kendall	312-313,496	Cambridge, Cedar Creek tributary near	482
at Syracuseat Wichita	310-311,496 391-392,500	Caney River near Elgin	456-457,503
near Coolidge	331-332,300	Cedar Bluff Reservoir near Ellis	97-98
surface-water record	304-305	Cedar Bluffs, Beaver Creek at	9,10,66-67,484
water-quality record	306-309,496	Cedar Creek, at Highway 56 at Olathe	45
near Hutchinson	363-364,499	mean daily dissolved oxygen surface-water record	15 239-240
near Kinsley near Larned	320-321,497	water-quality record	241-248
near Maize	328-329,497 365-366,499	below Olathe Lake near Olathe	259-260
near Nickerson	359-360,498	Cedar Creek near Cedar Point	466-467,503
tributary near Dodge City	482	Cedar Creek near Manhattan	481
Arkansas River Basin,		Cedar Creek tributary near Cambridge Cedar Point, Cedar Creek near	482 466-467,503
high-flow partial-record stations in	482-483	Cells/volume, definition of	29
miscellaneous surface-water stations in	496-504	Cells volume, definition of	29
surface-water stations in	303-478	Cfs-day, definition of	29
Arnold, Smoky Hill River near	95-96,486	Chapman, Chapman Creek near	163-164,490
Aroclor, definition of	28	Chapman Creek near Chapman	163-164,490
Artificial substrate, definition of	28	Chemical oxygen demand, definition of	30
Ash Creek tributary near Stockton	480 28	Chemical quality of precipitation	521-525
Atchison, White Clay Creek at	479	Cheney, Cheney Reservoir near	15,407-414
	•	Cheney Dam, North Fork Ninnescah	
В		River at	415-416
Bacteria, definition of	28	Cheney Reservoir, North Fork Ninnescah River above	15,397-406,500
Barnes, Little Blue River near	9,11,173-174,491	Cheney Reservoir near Cheney	10,001-400,000
Base discharge, definition of	29	surface-water record	407-408
Base flow, definition of	29	water-quality record	15,409-414
Bazine, Wet Walnut Watershed Structure	222 222	Cherryvale, Big Hill Creek near	454-455
No. 39 near Beaver Creek, at Cedar Bluffs	332-333 9,10,66-67,484	Chikaskia River near Corbin Cimarron River, near Elkhart	435-436,501 437-438,501
at Ludell	64-65,484	tributary near Satanta	437-438,301
Bedload, definition of	29	Circleville, Soldier Creek near	206-207,492
Bedload discharge, definition of	29	Claflin, Little Cheyenne Creek tributary	
Bed material, definition of	29	near	482
Belvue, Kansas River near	192-193,491 29	Clay Center, Republican River at	12,87-88,485 443-444,502
Benthic organisms, definition of Big Blue River, at Marysville	6,169-170,491	Climax, Otter Creek at Clinton Lake near Lawrence	223-224
near Manhattan	180-181,491	Clostridium perfringens, definition of	30
Big Bull Creek, at Paola	481	Clyde, Elk Creek at	480
near Edgerton	284-285,494	Colby, Prairie Dog Creek near	479
near Hillsdale	290-291,495	Color unit definition of	30
Big Creek, near Haystributary near Hays	103-104,486 480	Color unit, definition of	30
tributary near Ogallah	480	Comparison of water year monthly and annual mean streamflow to long-	
Big Hill Creek near Cherryvale	454-455	term median of monthly and annual	
Big Nemaha River Basin,		mean streamflow at selected	
		streamflow-gaging stations	10-11,13

Confined aquifer, definition of	12,85-86,485 30 30 30 30 30 30 304-309,496 480 480 1 435-436,501 464-465,503 468-469,503 458-459,503 361-362,499 393-394,500	below Elk City Lake Elkader, Smoky Hill River at Elkhart, Cimarron River near Ellis, Cedar Bluff Reservoir near Ellisworth, Smoky Hill River at Englewood, Crooked Creek near Enterprise, Smoky Hill River at Enterococcus bacteria, definition of EPT Index, definition of Escherichia coli (E. coli), definition of Estimated (E) value, definition of Euglenoids, definition of Example of site numbers for wells Explanation of, records elevation and water discharge accuracy of records	450-451,502 9,10,93-94,486 437-438,501 97-98 107-108,487 9,10,439-440,502 160-162,490 32 32 32 32 32 32 18 16-27 18-19 23
Crooked Creek near Englewood	9,10,439-440,502 30 30 30	data collection and computation data presentation identifying estimated daily discharge other records available ground-water levels	19-20 20-23 23 23-24 27
D		data collection and computation	27
Daily mean suspended-sediment concentration, definition of	30	data presentationstation-identification numbersdownstream order system	27 16 16,18
Daily-record station, definition of Data Collection Platform, definition of	30 30	latitude-longitude system	18
Data logger, definition of	30	surface-water qualityaccuracy of records	24-27 24
Datum, definition of Deerfield, Arkansas River at	31 314-315,496	arrangement of records	24-25
Definition of terms	28-43	classification of records	24
Degrees, conversion of Celsius (°C)		data presentationlaboratory measurements	26 25
to Fahrenheit (°F)	14	onsite measurements and sample	20
Delaware River, below Perry Damnear Muscotah	219-220	collection	25
streamflow less than Kansas		remark codessediment	26-27 25
minimum standards	12	water temperature	25
surface-water record water-quality record	214-215 216,492	Extractable organic halides,	
Delia, Soldier Creek near	210-211,492	definition of	32
Derby, Arkansas River at	395-396,500	F	
DeSoto, Kansas River at Diatoms, definition of	15,229-238,493 31	Factors for conversion of chemical	
Diel, definition of	31	constituents in milligrams or micro-	
Discharge, at partial-record stations	480-483	grams per liter to milliequivalents	
definition of	31	per liter	14
Discontinued streamflow goging			115 116 502
Discontinued streamflow-gaging stations	44-47	Fall River at Fredonia	445-446,502 16.523-525
stationsDiscontinued water-quality streamflow-		Fall River at Fredonia Farlington State Fish Hatchery Fecal coliform bacteria, definition of	16,523 ⁻ 525 32
stations Discontinued water-quality streamflow- gaging stations	48-50	Fall River at Fredonia Farlington State Fish Hatchery Fecal coliform bacteria, definition of Fecal streptococcal bacteria, definition of.	16,523-525 32 32
stations Discontinued water-quality streamflow- gaging stations Dissolved, definition of	48-50 31	Fall River at Fredonia Farlington State Fish Hatchery Fecal coliform bacteria, definition of Fecal streptococcal bacteria, definition of Fire algae, definition of	16,523-525 32 32 32
stations Discontinued water-quality streamflow- gaging stations	48-50	Fall River at Fredonia Farlington State Fish Hatchery Fecal coliform bacteria, definition of Fecal streptococcal bacteria, definition of.	16,523-525 32 32
stations Discontinued water-quality streamflow- gaging stations Dissolved, definition of Dissolved oxygen, definition of Dissolved-solids concentration, definition of	48-50 31 31 31	Fall River at Fredonia	16,523-525 32 32 32 464-465,503 32 165-166,490
stations Discontinued water-quality streamflow- gaging stations Dissolved, definition of Dissolved oxygen, definition of Dissolved-solids concentration, definition of Diversity index, definition of	48-50 31 31 31 31	Fall River at Fredonia	16,523-525 32 32 32 464-465,503 32 165-166,490 482
stations Discontinued water-quality streamflow- gaging stations Dissolved, definition of Dissolved oxygen, definition of Dissolved-solids concentration, definition of	48-50 31 31 31	Fall River at Fredonia	16,523-525 32 32 32 464-465,503 32 165-166,490
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Methylene blue active substances, definition of	35 35 35 35 35 91-92,486 89-90 171-172,491 481 194-195,492 35 484-504 35 484-504 35 481 480 35 419-420,500 12,214-216,492	Ogallah, Big Creek tributary near Olathe, Cedar Creek at Highway 56 at Cedar Creek below Olathe Lake near Olathe Lake near Olathe surface-water record water-quality record Open or screened interval, definition of Organic carbon, definition of Organism count/area, definition of Organism count/volume, definition of Organsm count/volume, definition of Organer Basin, high-flow partial-record stations in miscellaneous surface-water stations in precipitation, chemical quality of surface-water stations in Osborne, South Fork Solomon River at Otis, Wet Walnut Watershed Structure No. 2 near Ottawa, Marais des Cygnes River near Otter Creek at Climax Overland Park, Indian Creek at P Paola, Big Bull Creek at Parameter code, definition of Particle size, definition of Particle-size classification, definition of	480 15,239-248 259-260 15,249-258 249-250 15,251-258 36 36 36 36 36 36 36 481-482 493-495 523-525 265-302 147-148,489 340-341 280-281,494 443-444,502 263-264,493 481 36 12,474-476,504 36 36 36-37

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CALENDAR FOR WATER YEAR 2001

2000

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	Ву	To obtain				
	Length					
inch (in.)	2.54x10 ¹	millimeter				
	2.54x10 ⁻²	meter				
foot (ft)	3.048x10 ⁻¹	meter				
mile (mi)	1.609x10 ⁰	kilometer				
	Area					
acre	4.047x10 ³	square meter				
	4.047x10 ⁻¹	square hectometer				
_	4.047x10 ⁻³	square kilometer				
square mile (mi ²)	2.590x10 ⁰	square kilometer				
	Volume					
gallon (gal)	3.785×10^{0}	liter				
	3.785x10 ⁰	cubic decimeter				
	3.785x10 ⁻³	cubic meter				
million gallons (Mgal)	3.785x10 ³	cubic meter				
_	3.785x10 ⁻³	cubic hectometer				
cubic foot (ft ³)	2.832x10 ¹	cubic decimeter				
_	2.832x10 ⁻²	cubic meter				
cubic-foot-per-second day [(ft ³ /s) d]	2.447x10 ³	cubic meter				
	2.447x10 ⁻³	cubic hectometer				
acre-foot (acre-ft)	1.233x10 ³	cubic meter				
	1.233x10 ⁻³	cubic hectometer				
	1.233x10 ⁻⁶	cubic kilometer				
	Flow					
cubic foot per second (ft ³ /s)	2.832x10 ¹	liter per second				
	2.832x10 ¹	cubic decimeter per second				
	2.832x10 ⁻²	cubic meter per second				
gallon per minute (gal/min)	6.309x10 ⁻²	liter per second				
	6.309x10 ⁻²	cubic decimeter per second				
	6.309x10 ⁻⁵	cubic meter per second				
million gallons per day (Mgal/d)	4.381x10 ¹	cubic decimeter per second				
	4.381x10 ⁻²	cubic meter per second				
	Mass					
ton (short)	9.072x10 ⁻¹	megagram or metric ton				

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.